AN INTRODUCTORY COURSE ON SEMANTICS AND PRAGMATICS

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FOREWORD

This book draft has been compiled by me for introducing semantics and pragmatics to the students. It is a compiled work rather than written by me. I was planning to expand it with Tamil examples and make it a comprehensive one. But as it so happened that I could not find time to do it. And moreover it was lying in my lap since long. I thought it should see the light. So I am presenting it as such here. If I find time I will elaborate it to suit the Tamil students and scholars and make it a full-fledged version on semantics and pragmatics focusing on Tamil. So kindly bear with me for this lacuna.

RAJENDRAN SANKARAVELAYUTHAN

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AIM

The aim of the subject of study is to give a brief introduction to semantics and pragmatics. Semantics is the study of meaning. More precisely it is the study of the relation between linguistic expressions and their meanings. Pragmatics is the study of context. More precisely it is the study of the way context can influence our understanding of linguistic utterances.

UNIT 1
NATURE AND SCOPE OF SEMANTICS
CONTENT

1.1. Concept and definition of semantics
1.1.1. Concept of semantics
1.1.2. The definition of semantics
1.2. Brief history of semantics
1.3. Semantics and other Disciplines
1.4 Major Concerns of Semantics
1.5. Approaches to the study of semantics
1.5.1 Traditional Semantics
1.5.2 Behavioural Semantics
1.5.3 Structural Semantics
1.5.4 Generative Semantics
1.6. Branches of semantics
1.6.1. Lexical semantics
1.6.2. Grammatical semantics
1.6.3. Logical semantics
1.6.4. Linguistics and pragmatics

OVERVIEW

The term semantics simply means the study of meanings. The study explores how meaning in language is produced or created. Semantics not only concentrates on how words express meaning but also on how words, phrases and sentences come together to make meaning in language. To start with, you will be

motivated to focus on the nature and scope of semantics. Hence, here in this unit, you will be introduced to the concept and definition semantics, brief history of semantics, semantics and other disciplines, major concern of semantics, and the different approaches to the study of semantics.

The symbols employed in language must be patterned in a systematic way. You have been already informed that language is organized at four principal levels – sounds (i.e. Phonetics/phonology), words (i.e. Morphology), sentences (i.e. syntax) and meaning (i.e. semantics). Phonology and syntax are concerned with the expressive power of language while semantics studies the meaning of what has been expressed. Knowledge of grammar is an aspect of the innate cognitive ability of human beings. The power of interpretation complements that innate ability. Interpretation is an aspect of semantics. Therefore, language acquisition or learning includes not only the knowledge of the organization of sounds and structures, but also how to associate meaning to the structures. Semantics can, therefore, be characterized as the scientific study of meaning in language.

Semantics has been the subject of discourse for many years for philosophers and other scholars but later was introduced formally in literature in the late 1800's. Hence, we have philosophical semantics and linguistic semantics among other varieties of semantics. Earlier scholars in philosophical semantics were interested in pointing out the relationship between linguistic expressions and identified phenomena in the external world. In the contemporary world, especially in the United States philosophical semantics has led to the development of *semiotics.* In some other parts of the world, and especially, France, the term semiology has been favoured. The reliance on logical calculations in issues of meaning has led to the development of logical semantics. However, for your purpose in this course, emphasis is on linguistic semantics, with our interest on the properties of natural languages. You shall see how this study relates to other disciplines. We shall also examine the real issues in linguistic semantics.

Semantics has been identified as a component of linguistics. In its widest sense, linguistics is the scientific study of language. As a field of study, semantics is related to other disciplines. In semantics, we study the meaning of words and also how the meanings of words in a sentence are put together to form sentential meaning. Linguistic semantics studies meaning in a systematic and objective way. Since meaning as a concept is not static, a great deal of the idea of meaning still depends on the context and participants in the act of communication (discourse). There is a strong connection between meaning and pragmatics. The exchange or relay of information, message, attitude, feelings or values from one person to another contributes to the interpretation of meaning. This is done mainly by the use of language. It is often expressed that language is a system which uses a set of symbols agreed upon by a group to

communicate their ideas or message or information. These symbols can be spoken or written, expressed as gestures or drawings.

Depending upon the focus of study, semantics can be compartmentalized as lexical semantics, grammatical semantics, logical semantics and semantics in relation to pragmatics.

LEARNING OBJECTIVES

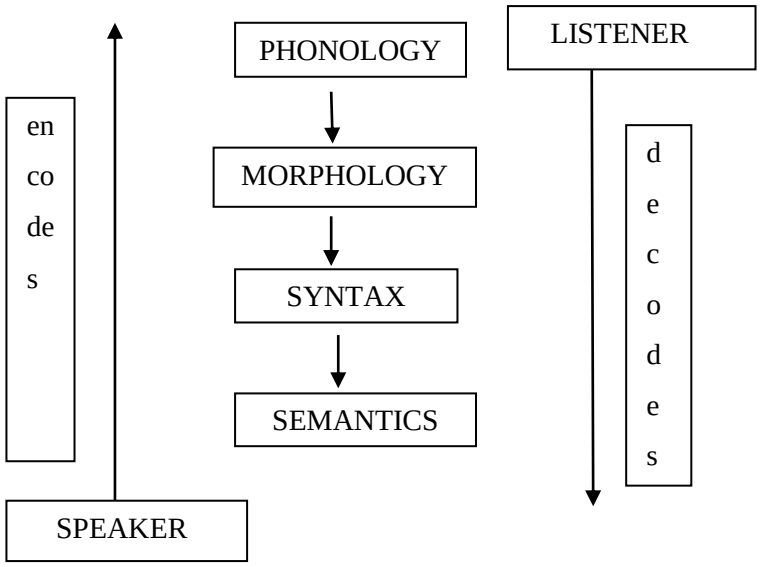
At the completion of this unit, you should be able to:

- define and explain the concept and definition of semantics
- trace the beginnings of Linguistic Semantics
- explain how semantics relates to other disciplines; and
- discuss the main areas of focus in semantics
- highlight different approaches to the study of semantics; and
- point out the merits and demerits of each of the approaches and
- discuss the important branches of semantics

1.1. The concept and definition of semantics

1.1.1. The Concept of Semantics

When you communicate using language, you convert or decode your thought (meaningful expression) into a series of sounds or alphabets and the listener decodes the sounds or alphabets into meaningful expression. It is the grammar which helps you to encode your thought into speech or written signals or decode the encoded speech or written signals into meaningful expression. If you don't know the grammar, the given speech or written text will be simply a series of sounds or alphabets for you. You might have learned from the introduction to linguistics that the grammar has at least four levels of analysis: (1) phonology which decodes sounds or phones into functional sound units or phonemes of the given language, (2) morphology which decodes the series of phonemes into morphemes (the minimal meaningful units of a language) and morphemes into words (3) syntax which decodes the words into phrases, phrases into clauses and clauses into sentences and (3) semantics which decodes syntactic out put into meaningful representation. You can represent the above information as given in the following diagram (Leech 1981:11).



The word ‘semantics’ is still a puzzle and has been interpreted and defined in many ways depending on the interest of the scholars who defined it. For example, the logicians, philosophers and linguists have different definitions for the word semantics. Ogden and Richard (1923) and Bloomfiled (1933) looked at the science for the clarification of semantic concepts. The problem of Ogden's and Richard's and Bloomfileld's approaches to meaning arises mainly from their determination to explain semantics in terms of other scientific disciplines. It is mistaken to try to define meaning by reducing it to the terms of science rather than the science of language. Meaning has to be studied as a linguistic phenomenon in its own right, not as something 'outside language'. As a linguist you are interested in recognizing relations of meaning between sentences, and in recognizing which sentences are meaningful and which are not. You wish to distinguish the 'knowledge of the language' from the 'knowledge of the world' (Leech 1981:21). Here you are concerned with linguistics semantics and so semantics is the way to interpret units of language such as morpheme, word, phrase and sentence. It is the meaning that distinguishes one linguistic unit from another unit.

Study of meaning is one of the major areas of linguistic study. Linguists have approached it in a variety of ways. Members of the school of interpretive semantics study the structures of language independent of their conditions of use. In contrast, the advocates of generative semantics insist that the meaning of sentences is a function of their use. Still another group maintains that semantics will not advance until

theorists take into account the psychological questions of how people form concepts and how these relate to word meanings.

1.1.2. The Definition of Semantics

Semantics as a term was first formally used by Breal in 1897. Hence, we can deduce that Breal was the first to bring to the fore in a formally acceptable way, the nature of meaning in language. Though the quest for the understanding of meaning has always been of interest to scholars, semantics was not mentioned as a term and did not come up in literature until 1897 when it was first used by Breal. This first attempt to study meanings by philosophers brought about the area of semantics called philosophical semantics which examines the relationship between linguistic expressions and the phenomena they refer to in the external world. Philosophical semantics focuses on examining the conditions under which such linguistic expressions and the phenomena they refer to are true or false. This can be traced to as far back as Plato's and Aristotle's works**.**

However, contemporary philosophical semantics can be traced to the works of the following authors: Rudolf Carnap [1891 - 1970], Alfred Tarski [Born 1902] and Charles Peirce [1839 - 1914]. According to Peirce, philosophical semantics developed as *Semiotics* in America while with the influence of Saussure in France, the term *Semiology* was used. However, the idea of truth-based semantics was Tarski's major contribution. Linguistic semantics emphasizes the properties of natural languages while pure or logical semantics is the study of the meaning of expressions using logical systems or calculi. Examining semantics in this dimension makes it more mathematically related than linguistic in nature. It is important to note that the discussion of semantics as a branch of linguistics began recently and this shall be our next focus.

You have noted that semantics has its origin in philosophy. Earlier scholars in philosophical semantics were interested in pointing out the relationship between linguistic expressions and identified phenomena in the external world. In the contemporary world, especially in the United States philosophical semantics has led to the development of *semiotics.* In some other parts of the world, and especially, France, the term *semiology* has been favoured. The reliance on logical calculations in issues of meaning has led to the development of *logical semantics.* However, for our purpose in this course, emphasis is on *linguistic semantics*, with our interest on the properties of natural languages. You shall see how this study relates to other disciplines. We shall also examine the real issues in linguistic semantics.

LEARNING ACTIVITY 1.1.

(1) Define semantics.
(2) Describe the levels of grammar which link sounds with meaning.

1.2. Brief History of Semantics

It has often been pointed out, and for obvious reasons, that semantics is the youngest branch of linguistics. Yet, interest in what we call today "problems of semantics" was quite alive already in ancient times. In ancient Greece, philosophers spent much time debating the problem of the way in which words acquired their meaning. The question why is a thing called by a given name, was answered in two different ways.

Some of them believed that the names of things were arrived at naturally, *physei*, that they were somehow conditioned by the natural properties of things themselves. They took great pains to explain for instance that a letter like "rho" seems apt to express motion since the tongue moves rapidly in its production. Hence its occurrence in such words as *rhoein* ("to flow"), while other sounds such as /s, f, ks/, which require greater breath effort in production, are apt for such names as *psychron* ("shivering") or *kseon* ("shaking"), etc. The obvious inadvertencies of such correlations did not discourage philosophers from believing that it is the physical nature of the sounds of a name that can tell us something about its meaning.

Other philosophers held the opposite view, namely that names are given to things arbitrarily through convention, *thesei*. The *physei-thesei* controversy or *physis-nomos* controversy is amply discussed in Plato's dialogue *Cratylus*. In the dialogue, Cratylus appears to be a part of the *physei* theory of name acquistion, while Hermogenes defends the opposite, *nomos* or their point of view. The two positions are then debated by Socrates in his usual manner. In an attempt to mediate between the two discussants he points out first of all that there are two types of names. Some are compound names which are divisible into smaller constituent element and accordingly, analyzable into the meaning of these constituent elements: *Poseidon* derives his name from *posi* ("for the feet") and *desmos* ("fetter") since it was believed that it was difficult for the sea god to walk in the water.

Socrates points out that the words in themselves, give us no clue as to their "natural" meaning, except for the nature of their sounds. Certain qualities are attributed to certain types of sounds and then the meaning

of words is analyzed in terms of the qualities of the sounds they are made of. When faced with abundant examples which run counter the apriori hypothesis: finding a "l" sound ("lambda") "characteristic of liquid movements" in the word *sklerotes* ("hardness") for instance, he concludes, in true Socratic fashion, that "we must admit that both convention and usage contribute to the manifestation of what we have in mind when we speak".

In two other dialogues, *Theatetus and Sophists*, Plato dealt with other problems such as the relation between thought language, and the outside world. In fact, Plato opened the way for the analysis of the sentence in terms which are partly linguistic and partly pertaining to logic. He was dealing therefore with matters pertaining to syntactic semantics, the meaning of utterances, rather than the meaning of individual words.

Aristotle's works (*Organon* as well as *Rhetoric* and *Poetics*) represent the next major contribution of antiquity to language study in general and semantics in particular. His general approach to language was that of a logician, in the sense that he was interested in what there is to know how men know it, and how they express it in language and it is through this perspective that his contribution to linguistics should be assessed. In the field of semantics proper, he identified a level of language analysis - the lexical one - the main purpose of which was to study the meaning of words either in isolation or in syntactic constructions. He deepened the discussion of the polysemy, antonymy, synonymy and homonymy and developed a full-fledged theory of metaphor.

The contribution of stoic philosophy to semantics is related to their discussion of the nature of linguistic sign. In fact, as it was pointed out centuries ahead of Ferdinand de Saussure, the theory of the Janus-like nature of the linguistic sign - *semeion* - is an entity resulting from the relationship obtaining between the signifier - *semainon* - (i.e. the sound or graphic aspect of the word), the signified - *semainomenon* (i.e. the notion) and the object thus named - *tynkhanon* -, a very clear distinction, therefore, between reference and meaning as postulated much later by Ogden and Richards in the famous "triangle" that goes by their name.

Etymology was also much debated in antiquity; but the explanations given to changes in the meaning and form of words were marred on the one hand by their belief that semantic evolution was always unidirectional, from a supposedly "correct" initial meaning, to their corruption, and, on the other hand, by their disregard of phonetic laws.

During the Middle Ages, it is worth mentioning in the field of linguistics and semantics the activity of the "Modistae" the group of philosophers so named because of their writings *On the Modes of Signification*. These writings were highly speculative grammars in wich semantic considerations held an important position. The "Modistae" adopted the "thesei" point of view in the "physei-thesei" controversy and their efforts were directed towards pointing out the "modi intelligendi", the ways in which we can know things, and the "modi significandi", the various ways of signifying them.

It may be concluded that throughout antiquity and the Middle Ages, and actually until the 19th century almost everything that came to be known about meaning in languages was the result of philosophic speculation and logical reasoning. Philosophy and logic were the two important sciences which left their strong impact on the study of linguistic meaning.

It was only during the 19th century that semantics came into being as an independent branch of linguistics as a science in its own right. The first words which confined themselves to the study of semantic problems as we understand them today, date as far back as the beginning of the last century.

In his lectures as Halle University, the German linguist Ch. C. Reisig was the first to formulate the object of study of the new science of meaning which he called *semasiology*. He conceived the new linguistic branch of study as a historical science studying the principles governing the evolution of meaning.

Towards the end of the century (1897), M. Bréal published an important book *Essay de sémantique* which was soon translated into English and found an immediate echo in France as well as in other countries of Europe. In many ways it marks the birthday of semantics as a modern linguistic discipline. Bréal did not only provide the name for the new science, which became general in use, but also circumscribed more clearly its subject-matter.

The theoretical sources of semantic linguistics outlined by Bréal are, again, classical logic and rethorics, to which the insights of an upcoming science, namely, psychology are added. In following the various changes in the meaning of words, interest is focused on identifying certain general laws governing these changes. Some of these laws are arrived at by the recourse to the categories of logic: extension of meaning, narrowing of meaning, transfer of meaning, while others are due to a psychological approach, degradation of meaning and the reverse process of elevation of meaning.

Alongside these theoretical endeavours to "modernize" semantics as the youngest branch of linguistics, the study of meaning was considerably enhanced by the writing of dictionaries, both monolingual and bilingual. Lexicographic practice found extensive evidence for the categories and principles used in the study of meaning from antiquity to the more modern approaches of this science: polysemy, synonymy, homonymy, antonymy, as well as for the laws of semantic change mentioned above.

The study of language meaning has a long tradition in Romania. Stati mentioned (1971: 184) Dimitrie Cantemir's contribution to the discussion of the difference between categorematic and syncategorematic words so dear to the medieval scholastics.

Lexicography attained remarkably high standards due mainly to B. P. Hasdeu. His *Magnum Etymologicum Romaniae* ranks with the other great lexicographic works of the time.

In 1887, ten years ahead of M. Bréal, Lazar Saineanu published a remarkable book entitled *Incercare asupra semasiologiei limbei romane. Studii istorice despre tranzitiunea sensurilor*. This constitutes one of the first works on semantics to have appeared anywhere. Saineanu makes ample use of the contributions of psychology in his attempts at identifying the semantic associations established among words and the "logical laws and affinities" governing the evolution of words in particular and of language in general.

Although it doesn't contain an explicit theory of semantics, the posthumous publication of Ferdinand de Saussure's *Cours de linguistique générale* 1916, owing to the revolutionary character of the ideas on the study of language it contained, determined an interest for structure in the field of semantics as well.

Within this process of development of the young linguistic discipline, the 1921-1931 decade has a particular significance. It is marked by the publication of three important books: Jost Trier, *Der Deutsche Wortschatz im Sinnbezink des Verstandes* (1931), G. Stern, *Meaning and Change of Meaning* (1931) and C. K. Ogden and J. A. Richards: *The Meaning of Meaning* (1923).

Jost Trier's book as well as his other studies which are visibly influenced by W. von Humbold's ideas on language, represent an attempt to approach some of the Saussurean principles to semantics. Analyzing the meaning of a set of lexical elements related to one another by their content, and thus belonging to a semantic "field", Trier reached the conclusion that they were structurally organized within this field, in such a manner that the significative value of each element was determined by the position which it

occupied within the respective field. For the first time, therefore, words were no longer approached in isolation, but analyzed in terms of their position within a larger ensemble - the semantic field - which in turn, is integrated, together with other fields, into an ever larger one. The process of subsequent integrations continues until the entire lexicon is covered. The lexicon therefore is envisaged as a huge mosaic with no piece missing.

Gustav Stern's work is an ambitious attempt at examining the component factors of meaning and of determining, on this ground, the causes and directions of changes of meaning. Using scientific advances psychology (particularly Wundt's psychology) Stern postulates several classifications and principles which no linguist could possibly neglect.

As regards Ogden and Richard's book, its very title *The Meaning of Meaning* is suggestive of its content. The book deals for the most part with the different accepted definitions of the word "meaning", not only in linguistics, but in other disciplines as well. It identifies no less than twenty-four such definitions. The overt endeavour of the authors is to confine semantic preoccupations to linguistic problems exclusively. The two authors have the merit of having postulated the triadic relational theory of meaning - graphically represented by the triangle that bears their names.

A short supplement appended to the book: *The Problem of Meaning in Primitive Languages* due to an anthropologist, B. Malinowski, was highly instrumental in the development of a new "contextual" theory of meaning advocated by the British school of linguistics headed by J. R. Firth (1935).

The following decades, more specifically the period 1930-1950 is known as a period of crisis in semantics. Meaning was all but completely ignored in linguistics particularly as an effect of the position adopted by L. Bloomfield, who considered that the study of meaning was outside the scope of linguistics proper. Its study falls rather within the boundaries of other sciences such as chemistry, physics, etc., and more especially psychology, sociology or anthropology. The somewhat more conciliatory positions which, without denying the role of meaning in language nevertheless allotted it but a marginal place within the study of language (Hockett, 1958), was not able to put an end to this period of crisis.

Reference to semantics was only made in extremis, when the various linguistic theories were not able to integrate the complexity of linguistic events within a unitary system. Hence the widespread idea of viewing semantics as a "refuge", as a vast container in which all language facts that were difficult to formalize could be disposed of.

The picture of the development of semantics throughout this period would be incomplete, were it not to comprise the valuable accumulation of data regarding meaning, all due to the pursuing of tradition methods and primarily to lexicographic practice.

If we view the situation from a broader perspective, it becomes evident that the so-called "crisis" of semantics, actually referred to the crisis of this linguistic discipline only from a structuralist standpoint, more specifically from the point of view of American descriptivism. On the other hand, however, it is also salient that the renovating tendencies, as inaugurated by different linguistic schools, did not incorporate the semantic domain until very late. It was only in the last years of the sixties that the organized attacks of the modern linguistic schools of different orientations were launched upon the vast domain of linguistic meaning.

At present meaning has ceased to be an "anathema" for linguistics. Moreover, the various linguistic theories are unanimous in admitting that no language description can be regarded as being complete without including facts of meaning in its analysis.

A specific feature of modern research in linguistics is the ever growing interest in problems of meaning. Judging by the great number of published works, by the extensive number of semantic theories which have been postulated, of which some are complementary, while some other are directly opposed, we are witnessing a period of feverish research, of effervescence, which cannot but lead to progress in semantics.

An important development in the direction of a psycholinguistic approach to meaning is Lakoff's investigation of the metaphorical basis of meaning (Lakoff and Johnson 1980). This approach draw on Elinor Rosch's notion of prototype, and adopt the view opposed to that of Chomsky, that meaning cannot be easily separated from the more general cognitive functions of the mind.

G. Leech considers that the developments which will bring most rewards in the future will be those which bring into a harmonious synthesis the insights provided by the three disciplines which claim the most direct and general interest in meaning: those of linguistics, philosophy and psychology.

LEARNING ACTIVITY 1.2.

(1) Trace the development of linguistic semantics.

(2) What are the contributions of philosophers to the development of semantics?

1.3. Semantics and other Related Disciplines

Meaning may be studied as a part of various academic disciplines. There is of course a significant degree of overlap between the disciplines, but characteristically all have something idiosyncratic and unique in their approach.

Semantics is a very broad field, since it involves the elements of the structure and function of language, which is closely related to psychology, philosophy and anthropology, and sociology. Anthropological interest in the field of semantics arises as the analysis of meaning in language can present language user in a practical culture. Philosophy is closely linked to semantics because the meaning of certain issues that can be explained philosophically (the meaning of phrases and proverbs). Psychology closely related to the semantics for psychology utilizing human psychiatric symptoms displayed verbally and nonverbally. Sociology has an interest in semantics, because a certain phrase or expression can be adequate social group or a particular social identity. Hopefully in this discussion beneficial to us all and add to treasury of knowledge

Linguistic meaning has been a topic of philosophical interest since ancient times. In the first decades of the 20th century, it became one of the central concerns of philosophy in the English-speaking world. This development can be attributed to an interaction of several trends in various disciplines. From the middle of the 19th century onward, logic, the formal study of reasoning, underwent a period of growth unparalleled since the time of Aristotle (384–322 BCE). Although the main motivation for the renewed interest in logic was a search for the epistemological foundations of mathematics, the chief protagonists of this effort—notably the German mathematician Gottlob Frege and the British philosopher Bertrand Russell—extended their inquiry into the domain of the natural languages, which are the original media of human reasoning. The influence of mathematical thinking, and of mathematical logic in particular, however, left a permanent mark on the subsequent study of semantics.

We recall that philosophy has been linked to the earliest postulation about meaning. There are still other disciplines that are relevant to semantics. A very strong ally of semantics is *logic*, itself, a branch of philosophy. Logical systems are known to exhibit coherent and consistent models for evaluating thought. Thus, logical postulations are the ideal but may not always reflect the real world in matters of language.

Semantics is also related to sociology and anthropology because of the connection between language and culture. The whole essence of cultural relevance in language justified the reliance on context for the meaning of expressions. Of particular interest to semantics is the intricate system of kinship terms and colour expressions.

By relying on the distinction between deep and surface meaning and the power of the human brain to generate many paraphrases of a single structure, semantics is related to psychology. Indeed, the mentalistic approach to meaning and language use, in the tradition of generative grammar, is a psychological issue. Furthermore, the approaches adopted by behavioural semantics in the stimulus – response connection in meaning are a purely psychological affair.

Semantics is also related to communication theory. Information is carried and processed in the communication system passing through the channel and the medium. The minimalisation of noise and the processing of feedback are aspects of the communication system. These are achieved by ensuring logical thinking.

LEARNING ACTIVITY 1.3.

Briefly discuss how semantics is related to other disciplines.

1.4. Major Concerns of Semantics

Semantics is associated with different issues related to meaning including *naming, concept, sense* and *reference.* Naming as a semantic process derives from the understanding that words are names or labels for things. The major problem with this naming view of semantics is that it is only nouns and nominal expressions that can be analysed semantically. In addition, abstract nuns like love, hatred, truth will be difficult to explain since they are not living things.

There is a red bull in the park.

This will have meaning, only if there is a red bull in a particular park. Thus, sentences that are lies may not be interpreted.

Concepts mediate between the mind constructs and objects in the real world. Saussure's sign theory and Ogden and Richards, semantic triangle derives from the conceptual approach to semantics. The approach emphasises the power of the mind to make images and to associate these images to objects and ideas. The approach is highly mentalistic, relying on the ability to associate one thing with another. This ability of association may not yield universal understanding. That explains why language experts develop dictionaries to aggregate meaning on a universal basis. Interestingly, the production of dictionaries relies heavily on denotations and connotations, two major angles to the study of meaning.

Reference relates to things, people and events in the world. It is the object or entity to which a linguistic expression relates. Thus, the referent of the word *boy* is a human being called *boy*. If meaning were restricted to reference, many words without obvious referents will be left out. It will be difficult to explain the meaning of *prepositions*, *conjunctions* and other grammatical unit.

Again, several linguistic expressions may relate to single referents. To avoid these limitations, semanticists use the words *denotation* and *connotation* to distinguish between meaning based on ostensivenss (i.e. pointing) or reference and extension.

Another interesting area of concern for semantics is sense. Sense explains the system of linguistic relationships which a lexical item contracts with others. If that relationship is paradigmatic, we have **synonymy**, **antonymy**, *etc.* But if the relationship is syntagmatic, we have **collocation**.

The scope of semantics covers a wide range of issues related to meaning. These issues are discussed in the different segments of this material.

LEARNING ACTIVITY 1.4.

Briefly discuss about the major concern of semantics.

1.5. Approaches to the Study of Semantics

You have learnt that the study of meaning in language has been of interest to both the linguist and the philosopher. It has also interested the general communicator. The study of semantics has developed from the earliest times to the modern period, giving it a historical view. That way, we can focus on four major approaches – traditional, behavioural, structural and generative perspectives.

1.5.1 Traditional Semantics

Traditional semantics is associated with the works of such great philosophers as Socrates, Plato and Aristotle as well as many others who came after them. Their main focus was on the nature of human language itself. Based on their views of the nature of human language, these early philosophers were divided into two – the naturalists and the nurturists.

To the naturalists, language was God-given such that there was hardly anything anybody could do to understand language. Man was not expected to make alterations, but should concern himself with merely observing and describing the rules of language. The Greek language was perceived to be the chosen language upon which all other languages should be based. Later, Latin became the focus of philosophical analysis.

The nurturists, on the other hand, viewed language as a social property common to a speech community. Language was therefore perceived to be man's creation for the convenience of communication. Thus, in spite of difference in languages, the uniting point is that they are all for communication.
Traditional semantics was also concerned with the relationship between form and meaning. The meaning of a word was considered as what it refers to. This view has also been shared by Ogden and Richards (1923). There have also been later scholars who believed that the image of a word takes shape in the speaker's or hearer's mind. Another major view of traditional semantics is that the meaning of a word can be decoded from its shape or sound. Words in this category are onomatopoeic. The major ideas in traditional semantics are reference, concepts, truth conditions etc.

1.5.2 Behavioural Semantics

The external environment is perceived to be the major stimulus to all human utterances. The stimulus-response scenario is synonymous with the cause and effect connection in most natural situations.

Those who favour the behavioural approach to semantics have argued that by reducing meaning to observable entities, language, as an aspect of human favour can lend itself to examination. They also argue that meaning is influenced by reinforcement. The theory stresses nurture rather than nature. Thus, the physical environment is perceived to contribute to meaning rather than the internal thought processes.

Though behaviourism tends to lend meaning to experimental explanation, it has been criticized for its rejection of introspection, concepts and ideas. It is not everything in language that can be observed physically. The over-reliance on reinforcement tends to present animal and human behaviour as identical.

1.5.3 Structural Semantics

The father of structuralism is Ferdinand de Saussure. Structuralism as a linguistic theory considers the structures and systems in language. Emphasis is on the process of segmenting and classifying the features of utterances.

Under structuralism, emphasis is on the analysis of sense relations that connect words and meaning. Sense is an expression of the system of semantic relationships a given word keeps with other expressions in a given language. This relationship is usually paradigmatic in terms of similarity and dissimilarity. The relationship of similarity occurs as synonymy, while the relationship of dissimilarity is referred to as antonymy. Structural processes are useful in lexical relations in the study of words.

1.5.4 Generative Semantics

Noam Chomsky is the father of generative grammar. According to the theory of transformational generative grammar, knowledge of language is generated in the mind. A language user has a finite set of rules from which he can generate an infinite number of sentences. This power of generations is facilitated by the power of transformational rules which convert deep structure sentence types into other various forms via transformations. At the beginning of Chomsky's generative grammar, there was the assertion that syntax was autonomous and independent of semantics. It was only later in *Aspects of the theory of Syntax* (1965) that Chomsky pointed out that the semantic component specifies the rules necessary for the interpretation of deep structures. This observation enhanced the semantic representation of sentences. Deep structures specify the original meaning of sentences before the application of transformations.

There was the immediate problem of explaining the meaning of multiple paraphrases from a single deep structure. Thus, generative semantics would be concerned with sentence meaning and interpretation. This will require the interpretation of functional roles in sentences. This interpretation has been explained by the Case theory as propounded by Charles Fillmore, and further elaborated in Chomsky's Case theory and Thematic theory.

The semantic component has been presented as being partially dependent on syntax and at the same time distinct. This produces a composite relationship between grammar and meaning. The deep structure is deemed to determine how sentence parts combine to make meaning for the whole. The syntactic component is the generative source of grammar. Thus, the output of syntax forms the input to the semantic component. The semantic component is perceived to operate on the structural description of sentences to provide a representation of the meaning of sentences. Grammar as used here is the totality of the mechanism and rules of language organization including meaning. As a result of the complexity of this theory, we shall have a more elaborate discussion of its implication in another unit. Perhaps the philosophical postulations of Aristotle provided impetus to critical thinking in semantics. Based on the major areas of concern, there have been traditional semantics, behavioural semantics, structural semantics and generative semantics.

LEARNING ACTIVITY 1.5.

(1) Discuss the contributions of the traditionalists to the development of semantics
(2) Explore how Generative Grammar has featured in the study of semantics.

1.6. Branches of semantics

Cruse (2000:15) lists the following as the main broadly distinguishable areas of interest in the study of meaning: lexical semantics, grammatical semantics, logical semantics, and linguistic pragmatics. They are not watertight compartments and they may overlap with one another.

1.6.1. Lexical semantics

Lexical semantics studies the meanings of words; the focus is on 'content' words like *lion, jasmine, selfish* and *persuade,* rather than form/grammatical words like *the, of, than,* and so on. A non-specialist mostly links the notion of meaning with words rather than any other linguistic units which are lesser than words (such as affixes) or wider than words (such as phrases, sentences). We consider dictionary as the one which deals about words. The branch of semantics which systematically study the meaning words is lexical semantics.

1.6.2. Grammatical semantics

Grammatical semantics studies aspects of meaning which have direct relevance to syntax. This has many manifestations. which can only be briefly dealt here. Syntactic categories are one the problems in the interface of syntax and semantics. For instance, consider the problem of assigning category to the word yellow. It can be given the category such as adjective, noun and verb as illustrated below:

She wears a yellow skirt. (adjective)
He painted the room with a glowing yellow. (noun)
The leaves yellows rapidly in the winter.

Another aspect of grammatical semantics is the meaning of grammatical morphemes like the *-ed* of called, the -er of stronger, the re- of *reshuffle* and al of *central.*

You can clearly visualize that this overlaps with lexical semantics due to the fact that some grammatical elements (such as *the* and *of*) are words and also due another fact that some amount of grammatical behavior is determined by the lexical items themselves. The following examples will illustrate this:

I am studying the book - grammatical
I am knowing the book - ungrammatical

1.6.3. Logical semantics

Logical semantics studies the relation between natural language and formal logical systems such as the propositional and predicate calculi. Such studies usually aim at modeling natural language as closely as possible using a tightly controlled, maximally strict logical formalism (Cruse, 2000: 15). Sometimes such studies shed more light on the formalism used than on the language being modeled. But valuable insights have cropped up from this approach. Most of such studies till date are concerned with the propositional or sentence level meaning and they rarely stoop down the level of words.

There is always a sense of logic in any language system. This places logic as a component of the meaning processes of natural language. It is this connection that makes logic a point of interest in semantics. It should be noted, however that the emphasis of logic in semantics is on the relations involved in complex sentences, rather than with the abstract mathematical formulations. We shall explore in this unit the structure of the sentence and how this structure contributes to meaning.

1.6.4. Linguistics pragmatics

Semantics is the study of meaning, or more precisely, the study of the relation between linguistic expressions and their meanings. Whenever we have a verbal disagreement, we disagree about the semantics of some expression we employed in stating our views. Pragmatics is the study of context, or more precisely, a study of the way context can influence our understanding of linguistic utterances. Whenever we have a contextual disagreement, we take ourselves to be in different contexts and the difference effects what we take ourselves to have done through our respective acts of stating our views. Settling on a shared meaning for the expressions we used may be hard, but settling on a shared take on the context is often harder.

For the present purpose, pragmatics can be taken to be concerned with aspects of information (in the widest sense) conveyed through language which are not encoded by generally accepted convention in the linguistic forms used, but which none the less arise naturally out of and depend on the meanings conventionally encoded in the linguistic forms used, taken in conjunction with the context in which the forms are used. It is by linguistic pragmatics we identify the individual referred by John in the sentence *I saw Raja yesterday*. The co-referential information between *room* and *it* inferred from the *example, Raja entered the room, It was empty* is a matter of linguistic pragmatics.

Pragmatics is usually contrasted with semantics, which deals with conventionalized meaning. The three divisions discussed above belongs to semantics.

LEARNING ACTIVITY 1.6.

Briefly discuss the branches of study of meaning in language.

SUMMARY

Semantics has been found to be related to a wide range of disciplines because of the general interest in meaning. In specific terms, semantics has been formed to be relevant to naming, reference and sense. It is also concerned with the interpretation of sentences.

You have observed the progression in the development of semantic thought. You have noted the positive relationship between semantics and other components of the language system. You can safely conclude

that while syntax, for instance provides the basis for the structure of the sentence, it is semantics that holds the key to meaning. This means that semantics is critical to communication.

You have learnt the approaches of the traditionalists, the behaviourists, the structuralists and the generativists to the study of semantics. You have read that the traditionalists were related to the early philosophers, while the behaviourists were more concerned with psychology, with the object of study being what is observed. Structrualists emphasised the sense relations between words while the generativists depended on the deep structures of sentences for meaning. It would be possible to identify the essential ingredients of these approaches to the study of semantics.

You have leant about the four important branches of semantics: lexical semantics, grammatical semantics, logical semantics, and linguistic pragmatics,

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UNIT 2

THE STUDY OF MEANING

CONTENT

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2.4.3. Pragmatics and discourse

OVERVIEW

You have observed that semantics is the linguistic study of meaning. You have also noted that meaning is central to the process of communication. Interestingly, there is usually the controversy about the nature of meaning. We shall explore in this unit the nature of meaning. Meaning is at the centre of the study of semantics – for both the philosopher and the linguist. However, there are differences in opinion based on approaches and methods. We shall explore meaning from the perspectives of the different schools of thought.

It will be recalled that language as a system is organised along the structures of sound, words, sentences and meaning. Each of these levels can be studied in some details, following specified formulations or theories. For the purpose of a detailed study of semantics, the theories we shall explore are expected to explain the nature of word and sentence meaning, among several other things. We shall examine the different perspectives to the study of meaning. We shall also discuss the types of meaning. We shall discuss, in the subsequent sections, the nature of semantic theories and explore specific theories.

LEARNING OBJECTIVES

At the end of this unit, you should be able to:

- explain different schools of thought in the study of meaning;
- describe the different types of meaning;
- state the functions of semantic theories;
- identify specific theories in semantic, and
- explain the different theories of meaning

2.1. Schools of Thought in Meaning

Both linguists and philosophers agree that meaning is central to semantics. However, there is considerable disparity among different scholars on the exact conception of meaning. Based on their understanding of the meaning of meaning and procedures, there are different schools of thought in relation to meaning. These are the **naturalists**, the **conventionalists** and the **contextualists**.

According to the naturalists with Plato as the chief proponent, the meaning of a word is the entity or thing it represents. There is an intrinsic relationship between sound and meaning. The major criticism of this view is that there exist very many words in natural languages without physical entities.

To the conventionalists, words and their meaning do not necessarily have any direct link. Whatever connection existing between a word and meaning is through a concept formed in the minds of the users of the language. Conventionalism is derived from the works of Aristotle.

According to J. Firth and other contextualists, the meaning of a word derives from its usage. Each of these approaches has had a profound impact on the practice of linguistics. Their contributions shall become apparent as the text progresses. Apart from focusing on the three principal approaches to the study of meaning, there are **thematic, conceptual** and **associative** types of meaning.

LEARNING ACTIVITY 2.1.

Describe the three schools of thoughts in meaning

2.2. Types of Meaning

You all know now that semantics is concerned with meaning and that morphemes, words, phrases and sentences have meaning. So semantics can be defined as the study of the meaning of morphemes, words, phrases and sentences. While listening to a spoken text or reading a written text you may feel that there the utterance convey many types of information or meaning. So you need to make certain distinctions in the meaning understood by you. That means you may feel that there are different types of meaning. Now, you may ask what are the types of meaning. Geoffrey Leech (1981) has an answer for you question. Leech in his book, 'Semantic- A Study of meaning' (1981) breaks down meaning into seven types. They are: conceptual or denotative meaning, connotative meaning, social meaning, affective or emotive meaning, reflected meaning, collocative meaning and thematic meaning. He gives primacy to conceptual meaning, Let us examine them one by one.

There are three basic types of meaning and these are **thematic**, **conceptual** and **associative**. Associative meaning can further be divided into connotative, collocative, affective, reflected and stylistic meanings. We shall for this section concentrate on thematic and conceptual meaning.

2.2.1 Thematic Meaning

You may organize or order words or phrases in an utterances to give them focus or emphasis. You may say *raajan teervil tooRRu viTTaan* or *teervil raajan tooRRuviTTaan* both meaning 'Rajan failed in the examination'; in the first case you give importance to *raajan* 'Rajan' and in the second case you give importance to *teervu* 'examination'. In such cases you have thematic meaning. Thematic meaning refers to what is communicated by the way in which a speaker or a writer organizes the message in terms of ordering focus or emphasis (Leech 1981). Thematic meaning helps us to understand the message and its implications properly. The different parts of the sentence also can be used as subject, object or complement to show prominence. It is done through focus, theme (topic) or emotive emphasis. Thus a sentence in active voice is different from the sentence in passive voice though its conceptual meaning is the same. For example, the following statements in active and passive voice have same conceptual meaning but different communicative values.

Mrs. Smith donated the first prize
The first prize was donated by Mrs. Smith.

In the first sentence **"**who gave away the prize "is more important, but in the second sentence **"**what did Mrs. Smith gave is important**".** Thus the change of focus changes the meaning also. The first suggests that we already know Mrs. Smith (perhaps through earlier mention) its known/given information while it's new information.

Alternative grammatical construction also gives thematic meaning. For example,

I like apples most.
Apples I like most
It is the apples I like most.

Like the grammatical structures, stress and intonation also make the message prominent. For example, the contrastive stress on the word *cotton* in the following sentence give prominence to the information.

Kannan likes mango fruit.
The kind of fruit that Kanna likes is mango.

Thus sentences or pairs of sentences with similar conceptual meaning differ their communicative value. This is due to different grammatical constructions or lexical items or stress and intonations. Therefore they are used in different contents. In the line "Ten thousand saw I at a glance", Wordsworth inverts the structure to focus on **'**ten thousand**",**

Sometimes thematic contrast i.e. contrasts between given and new information can be conveyed by lexical means.

Kannan owns the biggest shop in Chennai.
The biggest shop in Chennai belongs to Kannan.

The ways we order our message also convey what is important and what not. This is basically thematic meaning.
Thematic meaning derives from the organisation of the message presented in a language. It is the arrangement of the components of communication that determine the point of emphasis. This arrangement may take the form of **passivisation**, **topicalisation** or **focus**. In the sentences that follow, different items have been made more prominent by merely re-ordering them.

a. Jane bought the house – normal SVO order
b. It was Jane that bought the house – topicalised
c. The house was bought by Jane – passivised.
d. The house, Jane painted – focused

In sentence (a) the sentence is in the normal subject-verb-object order without any special meaning. Sentences (b) and (d) tend to lay emphasis on Jane, the doer of the action being referred to. In sentence (c), the emphasis is on the house which was bought.

Indeed, focused and topicalised elements in a structure are given prominence within an information structure. A component of the bit of information can also be made more prominent by stressing it. Consider further the following:

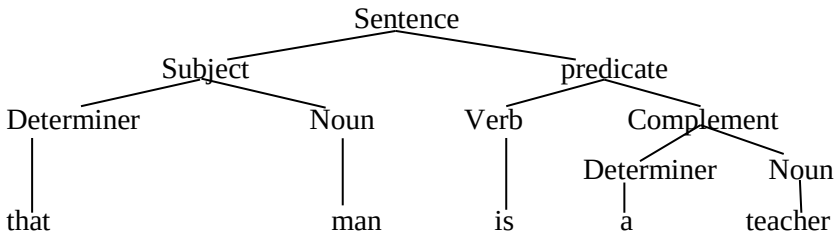
She BOUGHT my newspaper (She did not STEAL it)
She bought my NEWSPAPER (not my textbook)
SHE bought my newspaper (not any other person)

2.2.2 Conceptual Meaning

Conceptual meaning (Leech 1981:9) is synonymous with primary, central, logical, cognitive or denotati**ve** meaning of a word. It is the first ordinary meaning listed in dictionaries which is not affected by the context or emotional overtones associated with the act of communication. There is an assumed shared conceptual meaning of every word of a language. There is a universal implication of the conceptual meaning. It is widely assumed to be the central factor in linguistic communication. Conceptual meanings are the essential or core meaning while other six types are the peripheral. They are peripheral in as sense that they are non-essential. Conceptual meaning is also called as primary meaning . It is the meaning suggested by the word when it used alone. It is the first meaning or usage which a word will suggest to most people when the word is said in isolation. It is the meaning learned early in life and likely to have reference to a physical situation. The conceptual meaning of word is its agreed-upon sense - what it refers to, stands for, or designates. The aim of conceptual meaning is to provide an appropriate semantic representation to a sentence or statement. A sentence is made of abstract symbols. Conceptual meaning helps us to distinguish one meaning from the meaning of other sentences. Thus, conceptual meaning is an essential part of language. A language essentially depends on conceptual meaning for communication. The conceptual meaning is the base for all the other types of meaning.

You know that conceptual meaning is given primacy over other meanings. Conceptual meaning deals with the core meaning of expression. It is the denotative or literal meaning. It is essential for the functioning of language. For example, a part of the conceptual meaning of the word *needle* may be “thin”, “sharp” or “instrument**”.** The organization of conceptual meaning is based on two principles: principle of contrastiveness and the principle of structure. The conceptual meanings can be studied typically in terms of contrastive features. That is, it is possible to express the conceptual meaning of a word using contrastive semantic features. Such features indicate the attributes present and those that are absent. If a feature is present, it is specified as [+]; if absent, it is [-]. These contrastive features specifying the attributes of the words provide the necessary criteria for the correct use of words. You know already that /b/ is described in phonetics as +bilabial, + voice, + bilabial + stop/plosive and /p/ is described in phonetics as +bilabial, -voice, + bilabial + stop/plosive. It is the contrasting feature +/- VOICE which differentiates /b/ from /p/. Similarly the word *woman* can be represented as + HUMAN, -MALE, + ADULT". On the contrary, the word *boy* can be realized as + HUMAN, + MALE, - ADULT. The contrastive features which distinguishes *woman* from *boy* are +/-MALE and +/- ADULT. This way of representing meaning based on contrastive feature is known as principle of contrastiveness.

You know that not only the units of language are contrastive but also they are arranged sequentially. You can build larger units by combing smaller units and again combining the outcome of the first combination into still larger units and so on. Look at the example given below. You combine *that* and man into *that man* and *a* and *teacher* into a teacher; you interpret the first phrase *that man* as subject and *a teacher* as complement. You again combine *is* and *a teacher* into a larger unit *is a teacher*; you interpret this as predicate. By combining subject and predicate you construct a sentence. Now you understand that by the principle of structure, larger units of language are built up out of smaller units or you are able to analyze a sentence syntactically into its constituent parts hierarchically till you arrive at the ultimate constituents or smallest syntactic elements. You can represent this information by means of a tree-diagram as given below:



Now you understand that the aim of conceptual meaning is to provide an appropriate semantic representation to a sentence or statement. A sentence is made of abstract symbols. Conceptual meaning helps you to distinguish one meaning from the meaning of other sentences. Thus, conceptual meaning is an essential part of language. A language essentially depends on conceptual meaning for communication. The conceptual meaning is the base for all the other types of meaning.

The conceptual meaning of a word constitutes a major part of the shared system of a language for all speakers. It is a criteria element of human communication since it is a major factor in language. The use of this process, has been described as componential analysis. It is a major process in structural semantics.

2.2.3 Associative Meaning

The meaning of a word is affected by the context, background, time and the cultural realities of the users of language. This type of meaning is not static. It is variable and open ended. Certain words, structures and styles are usually employed to arouse some emotional reactions in the hearer. Certain attitudes and forms of behaviour are elicited by the associative meaning of the words used in communication. These

different reactions are derived from the associations which the words cerate in the minds of language users.

As a result of the great variation in associative meaning, it is not always easy to express that form of meaning in terms of contrastive semantic features. Indeed, associative meaning reflects individual differences. There are individualised intentions and interpretations. There is therefore, the need for all participants in communication to share common reference points, symbols and background for there to be any meaningful interaction.

Most of the problems of communication arise when associative meaning is assumed to be shared by all concerned. There must be a way of ensuring actual sharing of background. For second language learners, this problem is profound. This explains the enormous difficulty second language learners encounter with decoding the meaning of idioms and figurative expressions. They also find it difficult to apply appropriate idioms to diverse situations. Associative meaning can be any of the following:

- Connotative Meaning
- Collocative Meaning
- Reflected Meaning
- Stylistic or Social Meaning

2.2.3.1 Connotative Meaning

When you explore conceptual or denotative meaning, it will land you into connotative meaning. You may feel that the given expression gives you more information than what is encoded in it. That is you may feel that there is connotation apart from denotation. So you have connotative meaning apart from denotative meaning or conceptual meaning. Connotative meaning (Leech 1981:12-13) is the communicative value of an expression over and above its purely conceptual content. It is something that goes beyond mere referent of a word and hints at its attributes in the real world. It is something more than the dictionary meaning. Thus purely conceptual content of *woman* is +HUMAN + FEMALE+ ADULT. But the physical characteristics of woman such as 'biped', 'having a womb', etc , psychological and social attributes of woman such as be ‘gregarious’, ‘having maternal instinct’ or typical (rather than invariable) attributes of womanhood such as ‘capable of speaking continuously'’, 'experts in cooking’, ‘wearing skirt or sari', etc are connotations or connotative meaning. Still further connotative meaning can embrace putative properties of a referent due to viewpoint adopted by individual, group, and society as a whole. So in the

past woman was supposed to have attributes like frail, prone to tears, emotional, irrigational, inconstant , cowardly etc. as well as more positive qualities such gentle, sensitive, compassionate, hardworking etc. Connotations vary age to age and society to society.

The boundary between conceptual and connotative seems to be analogous. Connotative meaning is regarded as incidental, comparatively unstable, in determinant, open ended, variable according to age, culture and individual, whereas conceptual meaning is not like that . It can be codified in terms of limited symbols.

Connotative meaning contains elements of the conceptual meaning of a word and the individual's personal interpretation of what is communicated. That interpretation is based on the personal experience of the hearer. This means that connotative meaning varies with the experience of people in communication. It may also vary from society to society.

There are additional semantic features that are associated with connotative meaning. Thus, a great deal of the meaning of idioms and figurative expressions derive from connotation. There are symbols in literature which have different connotations in different cultures. For instance, among the Tamils, the fox or jackal is associated with the cunningness, cawing of crow is associated with the arrival of guest and cat crossing your way is associated with bad omen.

2.2.3.2 Collocative Meaning

You might have come across words which occur together mostly in utterances. Such co-occurrence is referred as collation and the outcome of the collocation gives rise to collacative meaning. Collocative meaning is the meaning which a word acquires in the company of certain other words. Words collocate or co-occur with certain words only. For example, *big business* is acceptable and not *large business* or *great business*. Collocative meaning refers to associations of a word because of its usual or habitual co-occurrence with certain types of words. *pretty* and *handsome* indicate 'good looking'**.** However, they slightly differ from each other because of collocation or co-occurrence. The word *pretty* collocates with *girls, woman, village, gardens*, flowers, etc. On the other hand, the word *handsome* collocates with *boys,* men**,** etc. So we have *pretty woman* and *handsome man*. Though *handsome woman* and *pretty man* are acceptable, they suggest different kinds of attractiveness because of the collocative associations of the two adjectives. Hence *handsome woman* may mean attractive woman but in a mannish way. The verbs *wander* and *stroll* are quasi-synonymous; they may have almost the same meaning; but while cows may

wander, but may not stroll as *stroll* collocates with human subject only. Similarly one 'trembles with fear' but 'quivers with excitement'. Collocative meanings need to be invoked only when other categories of meaning don't apply. Generalizations can be made in case of other meanings while collocative meaning is simply an idiosyncratic property of individual words. Collocative meaning has its importance and it is a marginal kind of category.

2.2.3.3 Affective Meaning

You use language to expresses your personal feelings, including your attitude to the listener, or your attitude to something you are talking about. Meaning of this type is called as affective or emotive meaning (Leech 1981:14). It is often conveyed through the conceptual or connotative content of the words used. For example. *home* for a sailor/soldier or expatriate and *mother* for a motherless child and a married woman (especially in Indian context) will have special effective, emotive quality. In affective meaning, language is used to express personal feelings or attitude to the listener or to the subject matter of his discourse. For Leech affective meaning refers to what is convey about the feeling and attitude of the speak through use of language (attitude to listener as well as attitude to what he is saying). Affective meaning is often conveyed through conceptual, connotative content of the words used. For example, "you are a vicious tyrant and a villainous reprobation and I hate you" Or "I hate you, you idiot". We are left with a little doubt about the speaker's feelings towards the listener. Here speaker seems to have a very negative attitude towards his listener. This is called affective meaning. But very often we are more discreet (cautious) and convey our attitude indirectly. For example, **"**I am terribly sorry but if you would be so kind as to lower your voice a little" conveys our irritation in a scaled down manner for the sake of politeness. Intonation and voice quality are also important here. Thus the sentence above can be uttered in biting sarcasm and the impression of politeness maybe reversed while for example, "Will you belt up?" can be turned into a playful remark between intimates if said with the intonation of a request. Words like darling, sweetheart or hooligan, vandal have inherent emotive quality and they can be used neutrally. I.A. Richards argued that emotive meaning distinguishes literature or poetic language from factual meaning of science. Finally it must be noted that affective meaning is largely a parasitic category. It overlaps heavily with style, connotation and conceptual content.

Affective meaning is related to the feelings and attitudes of the speaker towards the subject or the audience. This meaning is achieved by the choice of words. Certain words suggest positive feelings – *love, attraction, happiness, exciting* etc. Some others stir up negative reactions – *disgusting, nauseating,*

disappointing, etc. Interjections like *ah!, oh!, uh!, mmn!* often suggest the emotional state of the mind. Other words like darling, daddy, mummy etc. give an impression of endearment.

2.2.3.4. Reflected meaning

You know that a word can have more than one conceptual meaning or multiple conceptual meaning. If you interpret one meaning for the other, it is known by the term reflected meaning. In such cases while responding to one sense of the word you partly respond to another sense of the word too. For example in church service *The Comforter* and *The Holy Ghost* refer to the *Third Person of Trinity* (Leech 1981:16). *Comforter* and *Ghost* are religious words. They have both religious and general meaning. But unconsciously even in religious context you may interpret these terms by their non-religious meaning. You may feel *The Comforter* sounds warm and comforting while *The* Holy Ghost sounds 'awesome' or even 'dreadful'. One sense of the word seems to rub off on another especially through relative frequency and familiarity (e.g. a ghost is more frequent and familiar in no religious sense.). In poetry too you have reflected meaning as in the following lines from **'**Futility':

> Are limbs so dear-achieved, are sides,
> Full-nerved still - warm - too hard to stir?

The poet Wilfred Owen uses the word *dear* in the sense 'expensive'. But you may feel in the context of the poem the sense 'beloved' is also alluded. In such cases of multiple meaning, one meaning of the word pushes the other meaning to the background. Then the dominant suggestive power of that word prevails. This may happen because of the relative frequency or familiarity of the dominant meaning. This dominant meaning which pushes the other meaning at the background is called the reflected meaning.

Reflected meaning can be illustrated by words which have taboo meaning. For examples, the terms like *intercourse*, *ejaculation*, and *erection* cannot be used without invoking their sexual association. The word *intercourse* immediately reminds us of its association with sex (sexual intercourse). The sexual association of the word drives away its innocent sense, i.e. **'**communication'. The taboo sense of the word is so dominant that its non-taboo sense almost dies out. In some cases, the speaker avoids the taboo words and uses their alternative word in order to avoid the unwanted reflected meaning. For example, as Bloomfield has pointed out, the speakers avoid using the word *cock* and replace it by the word *rooster*. These words have non-sexual meanings too. (e.g. erection of a building, ejaculate-throw out somebody) but because of their frequency in the lit of the physiology of sex it is becoming difficult to use them in

their innocent/nonsexual sense. Thus we can see that reflected meaning has great importance in the study of semantics.

Reflected meaning relates to expressions with multiple meanings. Words with several meanings (i.e. polysemous words), have reflected meaning. There is, however, a dominant meaning among these several meanings. As a particular sense of a word begins to assume prominence, all other senses begin to be de-emphasised and with time, these other senses disappear. *Meat* used to refer to all forms of food and flesh for nourishment. The later meaning seems to have caught on.

2.2.3.5 Stylistic (or Social) Meaning

You know language is spoken in a society. So it is quite natural the language gives clue to about the society in which it is being spoken or the social context in which it is spoken. When you hear the utterance *naan neettu aattukkup pokarcca aaRu maNi aayiTucci* 'I was 6 o' clock when I reached home yesterday', you understood that the person who uttered the utterance belongs to Brahmin community. Similarly when you listen to the utterance *naan neettaikki cakka caappiTTeen* 'yesterday I age jackfruit'. you understand that the person who uttered it belongs to Kanyakumari district of Tamilnadu. The meaning conveyed by the piece of language about the social context of its use is called the social meaning (Leech 1981:14). The decoding of a text is dependent on our knowledge of stylistics and other variations of language. We recognize some words or pronunciation as being dialectical i.e. as telling us something about the regional or social origin of the speaker. Social meaning is related to the social situation in which an utterance is used. It is concerned with the social circumstances of the use of a linguistic expression. For example, some dialectic words inform us about the regional and social background of the speaker. In the same way, some stylistic usages let us know something of the social relationship between the speaker and the hearer. The following socio-stylistic variations are listed by Leech (Leech 1981:14):

Dialect (the language of a geographical region or social class)
Time (the language of eighteenth century, etc)
Province (language of law, of science, of advertising, etc.)
Status (Polite, colloquial, slang, etc., language)
Modality (language of memoranda, lectures, jokes, etc.)
Singularity (the style of Dickens, of Hemingway, etc.)

For example the utterance *I ain't done nothing* tells you about the speaker and that is the speaker is probably a black American, underprivileged and uneducated. Stylistic variation represents the social variation. This is because styles show the geographical region social class of the speaker. Style helps us to know about the period, field and status of the discourse. Some words are similar to others as far as their conceptual meaning is concerned. But they have different stylistic meaning. For example, *steed* , *horse* and *nag* are synonymous. You know they all mean a kind of animal i.e. horse. But they differ in style and so have different social meaning. *steed* is used in poetry; *horse* is used in general, while *nag* is slang. The word HOME can have many use also like *domicile* (official), *residence* (formal), *abode* (poetic), and *home* (ordinary use). Stylistic variation is also found in sentence as a whole. For example consider the following two sentences (Leech 1981:15).

> They chucked the stones at the cops and then did a bunk with the look.
> After casting the stones at the police, they abandoned with money."

The first could be said by two criminals after the event and second could be used by the chief Inspector in making his official report. Thus through the style and form of the utterances you come to know about the social facts, social situation, class, region, and the speaker-listener relation.

You may utter a sentence in a social situation as a request, an apology, a warning or a threat. Such social situations are known by the term illocutionary force. The illocutionary force of an utterance also can have social meaning. For example, the sentence, *I haven't got a knife* has the common meaning in isolation. But the sentence uttered to a waiter mean a request for a knife. Thus we can understand that the social meaning plays a very vital role in the field of semantics and in understanding the utterances and sentences in different contexts.

When a particular pattern of speech, language variety or speech form is associated with a specific social context, stylistic or social meaning is achieved. It is common knowledge that a speaker's choice of words and structures reveals his or her social, regional, geographical or even economic background. The choices can also reveal the level of familiarity between the speaker and the hearer.

Emphasis is usually on the different stylistic variations open to language users. Based on the level of familiarity, users have the following possibilities in making requests:

> I wonder if I could see you later today (indirect question) used for extreme politeness)

May I see you later today (very formal)
Can I see you later today (causal and less formal)

LEARNING ACTIVITY 2.2.

(1) List the different types of meaning discussed in the unit.
(3) Write short notes on thematic, conceptual associative, connotative and reflected forms of meaning.

2.3 Theories of Meaning

We have learnt that semantics deals with meaning in language. Just like every other discipline, there are theories to explain in detail the nature of meaning in a principled way. The most enduring semantic theories will be presented in this unit. It will be recalled that language as a system is organised along the structures of sound, words, sentences and meaning. Each of these levels can be studied in some details, following specified formulations or theories. For the purpose of a detailed study of semantics, the theories we shall explore are expected to explain the nature of word and sentence meaning, among several other things. We shall discuss, in the subsequent sections, the nature of semantic theories and explore specific theories.

Semantic theories explain the nature of meaning by utilizing a finite set of rules to explain a variety of semantic phenomena. Any theory of semantics should provide statements that explain meaning relationship – such as ambiguity, anomaly, contradiction, tautology, paraphrase, entailment, synonymy, hyponymy. This means that such a theory should be able to explain the inherent meaning characteristics of words and sentences.

Any reliable theory of semantics should relate meaning to syntax, highlighting the relationship between them. This means that the rules of sentence construction and those of word meaning should relate to explain in full the meaning of the sentence.

A viable semantic theory should also relate meaning to the contexts and situations of word and sentence usage for appropriate interpretation. There should also be a record of facts of meaning, linguistic reference and truth conditions. These requirements suggest that such a theory should be a part of the general linguistic theory. That means that semantic rules must have universal applications. Such rules must give clues to the nature of semantic features which distinguish lexical items of different languages of

the world. Since the theory should account for meaning properties on all languages, it helps to explain the structure of human languages. These expectations have been met at different levels by different theories of meaning. The following theories of meaning are listed by Leopore in his write up on "Semantics: Study of meaning" in Encyclopedia of Britannica:

- The Ideational Theory of meaning
- The behaviorist theory of meaning
- The referential Theory of meaning
- Possible-world theory of meaning
- Fregean theory of meaning
- Verificationist theory of meaning
- Truth-conditional theory of meaning
- Conceptual-role semantics
- Gricean theory of meaning
- The Usage Theory

2.3.1 The Ideational Theory of Meaning

The 17th-century British empiricist John Locke held that linguistic meaning is mental: words are used to encode and convey thoughts, or ideas. Successful communication requires that the hearer correctly decode the speaker's words into their associated ideas. So construed, the meaning of an expression, according to Locke, is the idea associated with it in the mind of anyone who knows and understands that expression.

But the ideational account of meaning, as Locke's view is sometimes called, is vulnerable to several objections. Suppose, for example, that a person's idea of grass is associated in his mind with the idea of warm weather. It would follow that part of the meaning of *grass*, for this person, is warm weather. If so, then the meaning of *grass* or any other word may be different for each person. And in that case, how does anyone fully understand anyone else? Similarly, suppose that a person mistakenly associates the word *beech* with the idea of an elm tree. Would it follow that, for this person, *beech* means elm? If so, how is it possible to say that anyone misunderstands the meaning of a word or uses a word incorrectly?

As these examples show, the ideational account ignores the "public" nature of meaning. Whatever meanings are, they must be things that different speakers can learn from and share with one another.

A further objection concerns compositionality. Suppose that a person associates the complex expression *brown cow* with the idea of fear, though he is not fearful of all brown things or of all cows—only brown cows. Thus, the meaning of *brown cow*, for this person, is not determined by or predictable from the meanings of *brown* and *cow*. Because the example can be generalized (anyone can associate any idea with any complex expression), it follows that the ideational account is unable to explain the compositionality of natural languages.

This theory was developed by the British empiricist philosopher, John Locke. The theory explains that the meaning attached to words can be separated from the word themselves. This means that meaning originates in the mind in the form of ideas. Words are just sensible signs for the convenience of communication. Language is therefore, a mechanism for expressing thoughts and thought is viewed as a succession of conscious ideas. The ideational theory is mentalistic. Thus the meaning of a word is the mental image or idea of the word or the expression generated in the mind of the speaker or hearer.

There is no attempt to define words and expressions using physical associations. Rather, the range of possible meanings ascribed to a given word is that set of available feelings, images, ideas, concepts, thoughts and inferences that can be produced as soon as a word is heard – (Glucksberg 1975:50).

The ideational theory is perceived to be abstract or imprecise because of dependence on mental images for decoding the meaning of words. Ideas may be too vague to comprehend. There are also many words (especially the abstract ones) that do not have specific physical realities, let alone mental manifestations. It is unthinkable that the mind can create an image of what the senses cannot perceive.

The theory may not be able to account for synonymous expressions. It may also be difficult to use the theory to explain the mental image conjured by sentences. Indeed, sentences derive their meaning more from the word order.

2.3.2 Behaviourist theory of meaning

In an effort to render linguistic meaning public and the study of linguistic meaning more "scientific," the American psychologist B.F. Skinner (1904–90) proposed that the correct semantics for a natural language is behaviouristic: the meaning of an expression, as uttered on a particular occasion, is either (1) the behavioral stimulus that produces the utterance, (2) the behavioral response that the utterance produces, or (3) a combination of both. Thus, the meaning of *fire!* as uttered on a particular occasion might include running or calling for help. But even on a single occasion it is possible that not everyone who hears *fire!*

will respond by running or calling for help. Suppose, for example, that the hearers of the utterance include a fireman, a pyromaniac, and a person who happens to know that the speaker is a pathological liar. The behaviourist account seems committed to the implausible view that the meaning of *fire!* for these people is different from the meaning of *fire!* for those who run or call for help.

The behaviorist account, like the ideational one, is also vulnerable to the objection based on compositionality. Suppose that a person's body recoils when he hears *brown cow* but not when he hears either *brown* or *cow* alone. The meaning of *brown cow*, which includes recoiling, is therefore not determined by or predictable from the meanings of *brown* and *cow*.

This approach has been influenced by the works of Watson Bloomfield and Skinner. Idealism or mentalism in traditional semantics looks at meaning as something established in the hearer's or speaker's mind. There is usually a non-physical process of thought, concept or feeling generating a mental experience. On the other hand, Behaviourism relies on observables and records of utterances. These observables and records are linked to their relationships with the immediate situations that produce them.

To the behaviourist, there is no belief in such mentalistic constructs as mind, concept and ideas. As a result, there is no room for introspection as a means of obtaining valid information since thoughts and feelings are usually personal. As a result of the highly psychological dimension of this theory, human and animal behaviour is identical. Experiences coming through the senses are the major sources of knowledge. There is determinism in the affairs of the world. There are universal laws governing every situation. As a result of this reliance on determinism, there is no predictability in evaluating human behaviour.

2.3.3 The Referential Theory of Meaning

Reference is an apparent relation between a word and the world. Russell, following the 19th-century British philosopher John Stuart Mill, pursued the intuition that linguistic expressions are signs of something other than themselves. He suggested that the meaning of an expression is whatever that expression applies to, thus removing meaning from the minds of its users and placing it squarely in the world. According to a referential semantics, all that one learns when one learns the meaning of *tomato* is that it applies to tomatoes and to nothing else. One advantage of a referential semantics is that it respects compositionality: the meaning of *red tomato* is a function of the meanings of *red* and *tomato*, because *red tomato* will apply to anything that is both red and a tomato.

But what about expressions that apparently refers to nothing at all, such as *unicorn*? A referential semantics would appear to be committed to the view that expressions such as *unicorn, Santa Claus,* and *Sherlock Holmes* are meaningless. Another problem, first pointed out by Frege, is that two expressions may have the same referent without having the same meaning. *The morning star* and *the evening star,* for example, refer to the same object, the planet Venus, but they are not synonymous. As Frege noted, it is possible to believe that the morning star and the evening star are not identical without being irrational (indeed, the identity of the morning star and the evening star was a scientific discovery).

Examples such as these have led some philosophers, including Mill himself and Saul Kripke, to conclude that proper names lack meaning. But the problem also affects common nouns, including definite descriptions. The descriptions *the first president of the United States* and *the husband of Martha Washington* apply to the same individual but are not synonymous. It is possible to understand both without recognizing that they refer to the same person. It follows that meaning cannot be the same as reference.

This theory is associated with Ogden and Richards (1922). According to the Referential theory, the meaning of a word is the object it refers to in the external world. That actual object is the *referent.* The connection between the words or expressions and their referents is through the process of thought. The words or expressions are just *symbols.*

One major criticism of this theory is that there are many words without physical objects they refer to. Such words are *intelligent, ugly, rich, poor* etc. Which do not have the concrete qualities of nouns may not have referents. Again, polysemous words (i.e. words with more than one meaning) may have the additional problem of having more than one referent. Items that belong to groups may not have physical objects that are identical. Every sub-group has specific feature. Individual members of the smallest sub-groups also have their identities. Therefore, we cannot talk about absolute identification for referents. The referential theory may not have a way to explain the meaning of words in the categories of adjectives, adverbs, prepositions and conjunctions.

2.3.4. Possible-world theory of meaning

Perhaps *unicorn* is meaningful because of what it would apply to in certain circumstances, though in actuality it does not apply to anything. And perhaps the descriptions *the first president of the United States* and *the husband of Martha Washington* are not synonymous because one can imagine circumstances in which the former would apply and the latter would not, and vice versa. George

Washington might not have become the first president, or Martha might not have married him. Suppose that the meaning of an expression is determined not only by what it applies to in the actual world but also by what it would apply to in different "possible worlds." According to possible-world semantics, the meaning of a proper or common noun is a function from possible worlds (including the actual world) to individuals or things: given a possible world as input, the meaning returns as output the individual or thing that the noun applies to in that world. The meaning of *the first president of the United States* determines that that expression applies to George Washington in the actual world but to other individuals in other possible worlds. This refinement of referential semantics does not compromise compositionality, because the meaning of *the first president of the United States* is still a function of the meanings of its constituent expressions in any possible world. The proposal also seems to account for the difference in meaning between descriptions whose referents are the same, and it seems to explain how an expression can fail to refer to anything and still be meaningful.

Yet there are important problems with possible-world semantics. Chief among them is the notion of a possible world itself, which is not well understood. In addition, it turns out that possible-world semantics does not entirely dispose of objections based on coreferential but nonsynonymous expressions and nonreferential but meaningful expressions. The expressions *triangular* and *trilateral*, for example, are not synonymous, but there is no possible world in which they do not apply to exactly the same things. And the expression *round square* appears to be meaningful, but there is no possible world in which it applies to anything at all. Such examples are easy to multiply.

2.3.5. Fregean theory of meaing

According to Frege, the meaning of an expression consists of two elements: a referent and what he called a "sense." Both the referent and the sense of an expression contribute systematically to the truth or falsehood (the "truth value") of the sentences in which the expression occurs.

As noted above, Frege pointed out that the substitution of coreferring expressions in a sentence does not always preserve truth value: if Smith does not know that George Washington was the first president of the United States, then *Smith believes that George Washington chopped down a cherry tree* can be true while *Smith believes that the first president of the United States chopped down a cherry tree* is false. Frege's explanation of this phenomenon was that, in sentences such as these, truth value is determined not only by reference but also by sense. The sense of an expression, roughly speaking, is not the thing the expression refers to but the way in which it refers to that thing. The sense of an expression determines what the expression refers to. Although each sense determines a single referent, a single referent may be

determined by more than one sense. Thus, *George Washington* and *the first president of the United States* have the same referent but different senses. The two belief sentences can differ in truth value because, although both are about the same individual, the expressions referring to him pick him out in different ways.

2.3.6. Verificationist theory of meaning

Frege did not address the problem of how linguistic expressions come to have the meanings they do. A natural, albeit vague, answer is that expressions mean what they do because of what speakers do with them. An example of this approach is provided by the school of logical positivism, which was developed by members of the Vienna Circle discussion group in the 1920s and ’30s. According to the logical positivists, the meaning of a sentence is given by an account of the experiences on the basis of which the sentence could be verified. Sentences that are unverifiable through any possible experience (including many ethical, religious, and metaphysical sentences) are literally meaningless.

The basic idea underlying verificationism is that meaning results from links between language and experience: some sentences have meaning because they are definable in terms of other sentences, but ultimately there must be certain basic sentences, what the logical positivists called “observation sentences,” whose meaning derives from their direct connection with experience and specifically from the fact that they are reports of experience. The meaning of an expression smaller than a sentence is similarly dependent on experience. Roughly speaking, the meaning of an expression is given by an account of the experiences on the basis of which one could verify that the expression applies to one thing or another. Although the circumstances in which *triangular* and *trilateral* apply are the same, speakers go about verifying those applications in different ways.

The case against verificationism was most ardently pressed in the 1950s by the American philosopher Willard Van Orman Quine. He argued that experience cannot be used to verify individual observation sentences, because any experience can be taken to verify a given observation sentence provided that sufficient adjustments are made in the truth values of the other sentences that make up the scientific theory in which the sentence is embedded. In the case of word meaning, Quine asked: What experience, or empirical evidence, could determine what a word means? He contended that the only acceptable evidence is behavioral, given the necessity that meanings be public. But behavioral evidence cannot determine whether a person’s words mean one thing or another; alternative interpretations, each compatible with all the behavioral evidence, will always be available. (For example, what possible behavioral evidence could determine that by *gavagai* a speaker means “rabbit” rather “undetached rabbit

part" or "time-slice of a rabbit"?) From the underdetermination of meaning by empirical evidence, Quine inferred that there is no "fact of the matter" regarding what a word means.

2.3.7. Truth-conditional theory of meaning

Confronted with the skepticism of Quine, his student Donald Davidson made a significant effort in the 1960s and '70s to resuscitate meaning. Davidson attempted to account for meaning not in terms of behaviour but on the basis of truth, which by then had become more logically tractable than meaning because of work in the 1930s by the Polish logician Alfred Tarski. Tarski defined truth for formal (logical or mathematical) languages in terms of a relation of "satisfaction" between the constituents of a sentence and sequences of objects. Truth is thereby determined systematically by the satisfaction of sentential constituents. Tarski showed how to derive, from axioms and rules, certain statements that specify the conditions under which any sentence of a given formal language is true.

Davidson's innovation was to employ a Tarskian theory of truth as a theory of meaning. Adopting Tarksi's distinction between an "object language" (an ordinary language used to talk about things in the world) and a "metalanguage" (an artificial language used to analyze or describe an object language), Davidson proposed that a semantic theory of a natural language is adequate just in case, for each sentence in the object language, the theory entails a statement of the form *'S' is true just in case p,* where *S* is a sentence in the object language and *p* is a translation of that sentence in the metalanguage. For the sentence *snow is white,* for example, the theory should entail a statement of the form *'snow is white' is true just in case snow is white.* Tarski had already shown how to derive such statements. Davidson's appropriation of Tarski's theory of truth thus rendered substantive the rough but venerable idea that to give the meaning of a sentence is to give its truth conditions.

But how can such a truth-conditional semantics explain the phenomena for which Frege invoked the notion of sense? The sentences *George Washington chopped down a cherry tree* and *the first president of the United States chopped down a cherry tree* share truth conditions: both are true just in case the individual who happens to be picked out by *George Washington* and *the first president of the United States* chopped down a cherry tree. But the sentences are not synonymous. Davidson suggested that the problem could be solved by constructing a semantic theory for the language of any given speaker who uses these sentences. In order to do so, one must observe the constraints of "radical interpretation"—in particular, the "principle of charity," which states that a speaker's sentences should be interpreted in such a way that most of them are counted as truthful. Interpretation proceeds as follows: collect the sentences that a speaker "holds true," then construct a semantic theory that entails for each of those sentences a

statement of the circumstances in which the speaker would hold that sentence true. According to Davidson, any such theory will entail *'George Washington chopped down a cherry tree' is true just in case George Washington chopped down a cherry tree* and *'the first president of the United States chopped down a cherry tree' is true just in case the first president of the United States chopped down a cherry tree* but not *'George Washington chopped down a cherry tree' is true just in case the first president of the United States chopped down a cherry tree* or *'the first president of the United States chopped down a cherry tree' is true just in case George Washington chopped down a cherry tree.* The fact that the circumstances in which the speaker would hold true *George Washington chopped down a cherry tree* are different from the circumstances in which he would hold true *the first president of the United States chopped down a cherry tree* accounts for their difference in meaning, thus solving Frege's problem.

Although Davidson's program was influential, most philosophers have remained skeptical of the idea that a theory of truth can serve as a theory of meaning, in part because of objections such as the following. Suppose that two speakers, A and B, are identical psychological twins, so that their psychological states are essentially undistinguishable. Each speaker utters the sentence *I am 30 years old*. Although they utter the same sentence, the referent of *I* as uttered by A is different from the referent of *I* as uttered by B. The truth conditions of the two utterances, therefore, will be different. According to the truth-conditional account, the meanings of the two utterances must accordingly be different. It follows that A and B do not understand, or mentally grasp, the meanings of their utterances. If they did, the fact that the meanings are different would entail that A's psychological state is different from B's. But by hypothesis their psychological states are the same. The advocate of the truth-conditional account thus faces a dilemma: either meaning is not the same as truth conditions, or speakers do not understand their utterances of sentences such as *I am 30 years old*.

2.3.8. Conceptual-role theory of meaning

In order to avoid having to distinguish between meaning and character, some philosophers, including Gilbert Harman and Ned Block, have recommended supplementing a theory of truth with what is called a conceptual-role semantics (also known as cognitive-role, computational-role, or inferential-role semantics). According to this approach, the meaning of an expression for a speaker is the same as its conceptual role in the speaker's mental life. Roughly speaking, the conceptual role of an expression is the sum of its contributions to inferences that involve sentences containing that expression. Because the conceptual role played by *I* is the same for both A and B, the meanings of the two utterances of *I am 30 years old* are the same, even though the referent of *I* in each case is distinct. In contrast, the meanings of

George Washington chopped down a cherry tree and *the first president of the United States chopped down a cherry tree* are different, even though they have the same truth conditions, because the conceptual role of *George Washington* is different from that of *the first president of the United States* for any speaker. Because the meanings of the two sentences are different, the corresponding beliefs are different, and this explains how it is possible for a person to affirm one and deny the other without being irrational.

Although the notion of conceptual role is not new, what exactly a conceptual role is and what form a theory of conceptual roles should take remain far from clear. In addition, some implications of conceptual-role semantics are strongly counterintuitive. For example, in order to explain how the meaning of *tomato* can be the same for two speakers, conceptual-role semantics must claim that the word plays the same conceptual role in the two speakers' mental lives. But this is extremely unlikely (unless the speakers happen to be psychological identical twins). As long as there is the slightest difference between them with respect to the inferences they are prepared to draw using sentences containing *tomato,* the conceptual roles of that word will differ. But then it is difficult to see how any sense could be made of communication. If each speaker assigns a different meaning to *tomato* and presumably to most other words, there is no common meaning to be communicated, and it is a mystery how speakers understand one another. If, on the other hand, the same words have the same meanings, it must follow that the words play the same conceptual roles, in which case there would be no need for communication; each speaker would understand and believe exactly what every other speaker does. In addition, conceptual-role semantics seems unable to account for compositionality, since the conceptual role of the complex expression *brown cow*, in the speaker who fears brown cows but not all brown things or all cows, is not determined by nor predictable from the conceptual roles of *brown* and *cow.*

2.3.9. Gricean theory of meaning

The British philosopher Paul Grice (1913–88) and his followers hoped to explain meaning solely in terms of beliefs and other mental states. Grice's suggestion was that the meaning of a sentence can be understood in terms of a speaker's intention to induce a belief in the hearer by means of the hearer's recognition of that intention.

Grice's analysis is based on the notion of "speaker meaning," which he defines as follows: a speaker S means something by an utterance U just in case S intends U to produce a certain effect in a hearer H by means of H's recognition of this intention. The speaker meaning of U in such a case is the effect that S intends to produce in H by means of H's recognition of that intention. Suppose, for example, that S utters *the sky is falling* to H, and, as a result, H forms the belief that the sky is falling. In such a case, according

to Grice, S had several specific intentions: first, he intended to utter *the sky is falling*; second, he intended that H should recognize that he (S) uttered *the sky is falling*; third, he intended that H should recognize his (S's) intention to utter *the sky is falling*; and fourth, he intended that H should recognize that he (S) intended H to form the belief that the sky is falling. In these circumstances, according to Grice, *the sky is falling* has the speaker meaning that the sky is falling. The place of conventional meaning in Grice's conception of language appears to be that it constitutes a feature of words that speakers can exploit in realizing the intentions referred to in his analysis of speaker meaning.

Although Grice's approach is not as popular as it once was, the general goal of reducing meaning to the psychological states of speakers is now widely accepted. In this sense, both Gricean semantics and conceptual-role semantics represent a return to the 17th century's emphasis on inner or mental aspects of meaning over outer or worldly aspects. To what extent semantic properties can be attributed to features of the human mind remains a deep problem for further study.

2.3.10. The Usage Theory of Meaning

The German scholar, Wittgenstein (1953), developed this theory. It has been elaborated upon by J. Firth and M.A Haliday. The usage theory is also referred to as the contextual or operational theory of meaning. The major motivation was fear that the meaning of certain classes of words could be lost if meaning were treated as just entities. According to the theory, the meaning of a word or an expression is determined by the context of its use. It is the effect created by a linguistic unit within a given context that expresses its full meaning.

LEARNING ACTIVITY 2.3

(1) Mention the different schools of thought in the study of meaning
(2) List any three theories of semantics
(3) State any three characteristics of semantic theories
(4) Discuss the nature of theories in semantics
(5) Provide a critique of the ideational and referential theories of meaning.

2.4. Three Perspectives on Meaning

There are at least three perspectives of meaning. They are 1. Lexical semantics, 2. Compositional semantics or sentential semantics (formal semantics) and 3. Discourse or pragmatics. Lexical semantics is

concerned with meanings of individual words. Compositional semantics explains how those meanings combine to make meanings for individual sentences or utterances. Discourse or Pragmatics explains how those meanings combine with each other and with other facts about various kinds of context to make meanings for a text or discourse. Dialog or Conversation is often lumped together with Discourse.

2.4.1. Lexical semantics

Lexical semantics (also known as lexicosemantics), is a subfield of linguistic semantics. The units of analysis in lexical semantics are lexical units which include not only words but also sub-words or sub-units such as affixes and even compound words and phrases. Lexical units make up the catalogue of words in a language, the lexicon. Lexical semantics looks at how the meaning of the lexical units correlates with the structure of the language or syntax. This is referred to as syntax-semantic interface (Wikipedia).

The study of lexical semantics looks at the classification and decomposition of lexical items, the differences and similarities in lexical semantic structure cross-linguistically and the relationship of lexical meaning to sentence meaning and syntax.

Lexical units, also referred to as syntactic atoms, can stand alone such as in the case of root words or parts of compound words or they necessarily attach to other units such as prefixes and suffixes do. The former are called free morphemes and the latter bound morphemes. They fall into a narrow range of meanings (semantic fields) and can combine with each other to generate new meanings.

2.4.2. Compositional semantics

The principle of compositionality states that the meaning of a sentence is determined by the meaning of its words and by the syntactic structure in which they are combined. It is concerned with the study of how meanings of small units combine to form the meaning of larger units. The following examples shows that the whole does not equal the sum of the parts and syntax matters to determining meaning.

The dog chased the cat ≠ The cat chased the dog.
The dog chased the cat = The cat was chased by the dog

The meaning of a sentence is determined by the meaning of its words in conjunction with the way they are syntactically combined. Anomaly, metaphor and idioms are exceptions to compositionality.

Anomaly: When phrases are well-formed syntactically but not semantically (i.e., they 'don't make sense')

Colorless green ideas sleep furiously.
That bachelor is pregnant.

Metaphor: The use of an expression to refer to something that it does not literally denote in order to suggest a similarity.

Time is money.
The walls have ears.

Idioms: Phrases with fixed meanings *not* composed of literal meanings of the words

Kick the bucket = 'to die'
*(*The bucket was kicked by John.)*
When pigs fly = 'it will never occur'
*(*She suspected pigs might actually fly tomorrow.)*
Bite off more than you can chew= 'to take on too much'
(**He chewed just as much as he bit off.)*

LEARNING ACTIVITY 2.4

Briefly discuss the three perspectives of meaning.

SUMMARY

Meaning has been presented to be at the centre of semantics. Meaning can be thematic, conceptual, associative, connotative, collocative, affective, reflected or stylistic. You have been briefly introduced to these types of meaning. The descriptions paved way for you to demarcate the core of linguistics from peripheral aspect of semantics. There are a number of theories in semantics, each with its own merits and demerits. You have observed that these theories provide a concise framework of analysis in semantics.

You have been instructed to different theories of meaning such as the ideational, referential and usage theories of meaning. You have also learned about the three perspectives of meaning.

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Unit 3

LEXICAL SEMANTICS I

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OVERVIEW

Lexical semantics is an academic discipline concerned with the meaning of words. Lexical semanticists are interested in what words mean, why they mean what they mean, how they are represented in speakers' minds and how they are used in text and discourse. Outside linguistics proper, lexical semantics overlaps with disciplines such as philosophy, psychology, anthropology, computer science and pedagogy. Within linguistics, it crucially overlaps with what is traditionally referred to as lexicology, which is the overall study of the vocabularies of languages. Here in this unit we are concerned with different approaches to lexical semantics and various types of lexical relations otherwise known as sense relations

LEARNING OBJECTIVES

At the end of this Unit, you should be able to:

- know the different approach the lexical semantics;
- explain different types of sense/lexical relations;
- apply sense relations in explaining the meaning of a language.

3.1. Approaches to Lexical semantics

There are many approaches to lexical semantics. Some of them are: one level vs. two level approaches, monosemic vs. polysemic approaches, the compositional approach, 'Holist' approach, conceptual approach and formal approach (Cruse, 2000:96-102).

3.1.1. One level vs. two level approaches

The question of whether a distinction has to be drawn between semantics and encyclopedic knowledge is a major dividing line which separates semantists into two groups. The group of semantists who believe that such a division has to be made often compare their position with the distinction between phonetics and phonology. We know that human beings can make and learn to recognize an almost infinitive number of speech sounds. But only a handful of these function distinctively to make utterance different, or enter into systemic relation of any complexity in any particular language. These functional units are the true linguistic elements on the phonological system of the concerned language. In a similar way the variety of 'raw' meanings is virtually infinite, but only a limited number of these are truly linguistic and interact systematically with other aspects of the linguistic system. The vast detailed knowledge of the world, which speakers undoubtedly possess, is according to the dual-level view, a property, not of language elements, but of concepts, which are strictly extralinguistic.

The supporters of single-level view claim that no arbitrary basis for assigning aspects of meaning (or knowledge) to the 'semantic' or 'encyclopedic' side of an alleged dichotomy has been put forwarded which survives even a cursory scrutiny. Most cognitive linguists would take the view that all meaning is conceptual, and that the 'extra' level of structure proposed by the two-level camp does not actually do any theoretical work. The distinction between grammatical and lexical/encyclopaedic meaning is not necessarily denied, but it is likely to be seen as a continuum, rather than a dichotomy and entirely conceptual in nature.

3.1.2. Monosemic vs. polysemic approaches

The distinction between the monosemic and polysemic approach relays on the question how many meanings ought to be attributed to a word. The clear-cut cases of homonymy, like that of *bank* There is beyond any dispute. There is no conceivable way of deriving one meaning from the other in this case. But the dispute lies on the bunch of related senses which a characteristic of polysemy. The monosemic view advocates that as few senses as possible should be given separate identification in the lexicon of a language, and as many as possible have to be derived from them. The understanding is that if one reading of word is in any way a motivated extension of another one, then only one should be recorded, and the other should be left to the operation of lexical rules. The rules in general apply to more than one instance and hence represent systematicity in the lexicon.

The polysemic approach rejects the assumption that a motivated extension of a word sense does not need to be recorded in the lexicon. The basic reason for this is that lexical rules only specify potential

extensions of meaning, only some of which become conventionalized and incorporated in the lexicon: others are possible, and may appear as nonce forms, but there is none the less a clear distinction between these and those which are established.

Take the case of *drink*. In many contexts it is clear what is being drunk, but obviously one would not wish to create a different lexical entry for drink corresponding to every possible drinkable liquid. To this extent, the monosemists and the polysemists would agree. However, it is possible for some particular dinkable items to be incorporated into a specific reading for drink. In principle, any class of beverage could be incorporated in this way. But in English, only "alcoholic beverages" can be encodes as follows: *I'm afraid Raja has started drinking again*. Now in principle, this could have happened with fruit juice instead of alcohol. But English lexicon can account one of these possibilities. The majority view nowadays is probably monosemic, but the polysemic position cannot be negated.

3.1.3. The Compositional approach

One of the earliest and still most persistent and widespread ways of approaching word meaning is to think of the meaning of a word as being constructed out of smaller, more elementary, invariant units of meaning. This stand is comparable to the atomic structure of matter. The immediate inspiration for the first proposal of these lines came from phonology. These "semantic atoms" are variously known as semes, semantic features, semantic components, semantic markers, semantic primes. Here the merest outline of the approach is presented; componential semantics is treated in great detail in unit 5.

The componential approach to semantics might have cropped up into modern linguistics at first due to Hjelsmslev (1916). He believed as a matter of principle that the meaning side of the linguistics sign should show the same structuring principles of the sound side. For him the notion of reduction was of major importance. The phonological structure of hundreds of thousands of different signs in a language can be analyzed as combinations of syllables drawn from a list of a few hundred, and these, in turn, can be shown to be built out of phonemes belonging to an inventory of fifty or so, thus arriving at the ultimate phonological building blocks, the distinctive features, whose number is of the order of dozen. In the same way, the meaning side of signs should be reducible to combinations drawn from an inventory significantly less numerous than the stock of signs being analysed. Hjelmslev seem to have in mind was the discovery of a set of basic words, out of whose meanings all other word meanings could be constructed. Hjelmslev was the first structural semanticists: the approach was developed considerably by European linguists.

A componential approach developed in America, seemingly independently of the movement in Europe. It first appeared amongst anthropological linguists, and scored significant success in reducing the apparent impenetrable complexity of kinship systems to combination: from a limited set of features. A new version, proposed by Katz and Fodor (1963), appeared in the context of Chomskyan generative grammar. This was much more ambitious than anything which had appeared previously: first it formed an integral part of a complete theory of language; second, it made claims of universality and psychological reality; and third, the features were not confined to the meanings of existing words, but were of an abstract nature.

3.1.4. 'Holist' approach

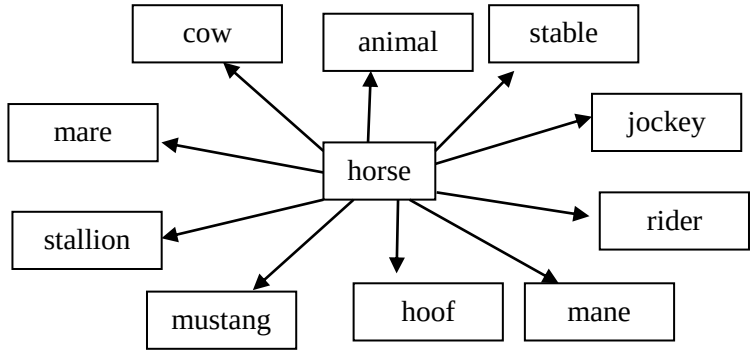
It is a belief of all componentialists that the meaning of a word can, in some useful sense, be finitely specified, in isolation from the meanings of other words in the language. Among philosophers of language, this is known as the localist view. For a localist, contextual variation can be accounted for by rules of interaction with contexts. The contrary position is the holistic view, according to which the meaning of a word cannot be known without taking into account the meanings of all the other words in a language. There are various versions of holism: two will be outlined here.

Hass

Hass's view of meaning derives from Wittgenstein's 'use' theory of meaning which is encapsulated in the dictum: "Don't look for the meaning - look for the use." Hass is inspired by J.R. Firth's dictum: "Words shall be known by the company they keep". Hass went further than this. He said that the meaning of a word was a semantic field (not the usual semantic field) which had two dimensions: a syntagmatic dimension, in which all possible contexts of the word were arranged in order of normality; and paradigmatic substitutes for the word were arranged in order of normality; and a paradigmatic dimension, in which for each context, the possible paradigmatic substitutes for the word were arranged in order of normality. Relative normality was for Hass a primitive. In principle, 'context' includes extra linguistic context. According to Hass the word's semantic field constitutes its meaning. Notice that every word therefore participate in the meaning of every other word; there is therefore no distinction between word meaning and encyclopedic knowledge. Hass's view was that the semantic field of a word actually constituted the meaning of the word.

Lyons

A second variety of holism is represented by Lyons (1977). The essence of this approach is the quintessentially Saussurean belief that meanings are not substantive, but relational, and are constituted by contrasts within the same system. Lyons states that the sense of a lexical item consist of the set of sense relations which the item contrasts with other items which participate in the same field. He insists sense relations are not relations between independently established sense; one should rather say that senses are constituted out of sense relations. So, for instance the meaning of horse should be portrayed along the lines shown in the following figure:



In this system, the links are specific sorts, such as "is a kind of" (e.g. horse: animal). "is not a kind of" (e.g. horse: cow), "is a part of" (e.g. mane: horse), " is a characteristic nose produced by (e.g. neigh: horse), "is a dwelling place for" (e.g. stable: horse), and so on. Since the words illustrated also enter into relation with other words than horse, the meaning of horse is a complex work of relations potentially encompassing the whole lexicon.

3.1.5. Conceptual approach

Conceptual approaches are single-level approaches and identify the meaning of a word with the concept or concepts it gives access to in the cognitive system. Among cognitive linguists, the prototype model of concept structure holds sway. The origins of the prototype approach can be traced to Wittgenstein. Wittgenstein proposed the notion of family resemblance: the members of a large family typically resemble on another in a variety of ways. Although important in breaking the stronghold of the Aristotelian theory, this notion is not very helpful for semantic analysis.

The notion of non-Aristotelian categories was taken up and further refined by cognitive psychologists, especially Rosch and her co-workers. She established what is known as prototype theory as an account of natural categories. On this account, members of a category are not equal - they vary in how good they are, or how representative, of the category. The very best are the prototypical members, and the category is essentially built round these.

Jackendoff is another linguist who locates word meaning in conceptual structure. Like the cognitive linguists, he is sees no need for an intermediate "linguistic semantics". Unlike many cognitive linguists, however, he is strongly componentialist, and believes that intuitively perceived relationships should be accounted for in terms of shared semantic building blocks.

3.1.6. Formal approaches

Formal approaches to semantics attempts to express the facts of meaning through a strict formalism, preferably closely related to one of the standard logics.

LEARNING ACTIVITY 3.1

(1) What are the different approaches to lexical semantics listed in Cruse (2000).
(2) Differentiate between monosemic and polysemic apparoaches.
(3) Explain how holistic approach to lexical semantics is different from componential analysis.
(4) Explain the uniqueness of conceptual approach to lexical semantics.

3.2. Lexical relations

There are two main modes for exploring word meaning: in relation to other words, and in relation to the world. The traditional method used in dictionaries is to define a word in terms of other words. Ultimately, this strategy is circular, since we must then define the words we use in the definition, and in their definitions, until finally we must either run out of words or re-use one of the words we are trying to define. One strategy is to try to find a small set of **semantic primes**: Wierzbicka identifies on the order of 50 or so concepts (such as GOOD, BAD, BEFORE, AFTER, I, YOU, PART, KIND...) that allegedly suffice to express the meaning of all words (in any language). Whether this research program succeeds or not has important implications for the nature of linguistic conceptualization.

In any case, speakers clearly have intuitions about meaning relations among words. The most familiar relations are **synonymy** and **antonomy**. Two words are synonyms if they mean the same thing, e.g., filbert and hazelnut, board and plank, etc. Two words are antonyms if they mean opposite things: *black* and *white*, *rise* and *fall*, *ascent* and *descent*, etc. One reason to think that it is necessary to recognize antonomy as an indispensable component of grammatical descriptions is because at most one member of each antynomous pair is allowed to occur with measure phrases: *tall* is the opposite of *short* , and we can say *Bill is 6 feet tall*, but not **Tom is 5 feet short*. Other major semantic lexical relations include **hyponymy** (names for subclasses: terrieris a hyponym of dog, since a terrier is a type of dog), and **meronymy** (names for parts: finger is a meronym of hand).Words whose meanings are sufficiently similar in some respect are often said to constitute a **semantic field**, though this term is rarely if ever given a precise definition. Terms such as *red, blue, green*, etc., are members of a semantic field having to do with color. Miller and associates have developed a lexical database called WordNet, a kind of multidimentional thesaurus, in which these types of lexical relations are explicitly encoded. Thus WordNet is an attempt to model the way in which a speaker conceptualizes one kind of word meaning.

3.2.1. Paradigmatic and syntagmatic relations

From the point of view of structural linguistics, linguistic units can be studied from the point of two axes: syntagmatic and paradigmatic axes. Syntagmatic axis gives you syntagmatic relations between the units. Paradigmatic axis gives you paradigmatic relations between the units. Similarly meaning of linguistic units can be studied by means of these two axes oriented relations. Syngamatic relation is the relation between words that appear in a sentence. It can be visualized as relation in the horizontal axis. Paradigmatic relation is the relation between words that can replace a word that appear in a sentence. It can be visualized as a a relation in the vertical axis.

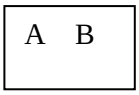
The	boy	beat	a/an	dog
	girl	kick		snake
	man	hit		cat
	human being	hurt		animal

The relation between *boy*, *beat*, and *dog* is syntagmatic relation. The relation between *girl*, *man* and *human being* that can replace one another or between *dog*, *snake*, *cat* and animal that can replace one another one another in a context is paradigmatic relation.

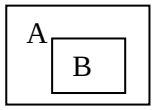
3.2.2. Congruence Relations

The four basic relations between classes furnish a model not only for establishing fundamental group of sense relations, but also for defining a set of systematic variants applicable to virtually all other paradigmatic sense relations (Cruse, 1986:86). The basic lexical relations are referred as congruence relations.

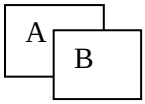
Identity: class A and class B have same members



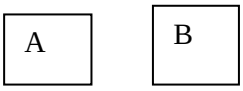
Inclusion: class B is wholly included in the class A



Overlap: class A and class B have members in common but each has members not found in the other



Disjunction: class A and class B have member in common



Relationships between word meanings

3.2.3. Paradigmatic sense relations of identity and inclusion

The paradigmatic sense relations of identity leads to synonymy and the paradigmatic relations of inclusion leads to hyponymy-hypernymy and meronymy-holonymy relations.

3.2.3.1. Synonymy

The lexical items which have the same meaning or which share same componential semantic features are synonyms and the relationship existing between them is synonymy. Synonymy does not necessarily mean that the items concerned should be identical in meaning, i.e. interchangeable in all contexts. Synonymy can be said to occur if lexical items are close enough in their meaning to allow a choice to be made

between them in some contexts, without there being any difference in the meaning of the sentence as a whole. Take, for examples, the following words in Tamil, *puttakam* 'book' and *nuul* 'book'. *avan oru puttakam paTittaan 'he read* a book' can entail *avan oru nuul paTittaan* 'he read book'. The relation existing between *puttakam* and *nuul* is synonymy and *puttakam* and *nuul* are synonyms. Similarly *fiddle* and *violin* are synonyms. For instance *He plays the violin* very *well* entails and is entailed by *He plays fiddle very wel*l. The following pairs of words can be considered as synonym pairs: *filbert*: *hazelnut*, *couch*: *sofa, big*: *large, automobile*: *car*, *vomit*: *throw up, Water: H_20*.

Two lexemes are synonyms if they can be successfully substituted for each other in all situations. If so they have the same propositional meaning . Synonymy is a relation between senses rather than words. Consider the words *big* and *large.* You may consider them as synonyms when you come across the following examples:

How **big** is that plane?
Would I be flying on a **large** or small plane?

But you may hesitate to judge them as synonyms when you come across the following examples:

Miss Nelson, for instance, became a kind of **big** sister to Benjamin.
?Miss Nelson, for instance, became a kind of **large** sister to Benjamin.

The reason is *big* has a sense that means being older, or grown up; *large* lacks this sense. But there are few (or no) examples of perfect synonymy. Even if many aspects of meaning are identical, still may not preserve the acceptability based on notions of politeness, slang, register, genre, etc. The synonym pair *water* and *H_20* will illustrate the above point.

When reference is made to lexical relation or close relatedness in the meaning of words, we deal with *synonymy*. We can therefore, describe pairs of words that have very close similarities in meaning as synonyms. For example we can have the following pairs of words as synonyms:

friend: ally: boss: master; amiable: friendly

It has often been observed that words may not always have exact substitutes in all contexts. This observation means that we may have absolute, complete and total synonyms when there are exact substitutes as shown by the following examples:

everybody: everyone; bandit: brigand

There are also broad or near synonyms as seen from the following examples:

rich: sumptuous; mature : ripe

Thus we have different kinds of synonyms: absolute synonymy, propositional synonymy and near-synonymy (Cruse: 2000:156-160). Absolute synonymy refers to complete identify of meaning. Propositional synonymy can be defined in terms entailment. If two lexical items are propositional synonyms, they can be substituted in any expression with truth-conditional properties without effect on those properties (Cruse: 2000:158). For example, *Raja brought a violin* entails *Raja bought a fiddle*. So *fiddle* and *violin* are synonyms.

3.2.3.2. Hyponymy and Hyperonymy

When the meaning of one form is included in the meaning of another, we have hyponymy. For instance, included in *animals* are *dogs, elephants, goa*t, etc. We can also relate hyponymy to *professions* to include *law, medicine, teaching, banking*, etc. There is always a hierarchical relationship drawing from the general to samples. The general term is usually referred to as **superordinate** term while the terms that indicate inclusion are referred to as **hyponyms**. Simply then, hyponymy is about relations of inclusion.

As such, we can say that *flower* is a superordinate term while *rose, hibiscus, cauliflower, sunflower, carnation, forget-me-not*, etc. are hyponyms of flower. Co-occurring hyponyms are referred to as **co-hyponyms**. Thus, *table, chair, cupboard, wardrobe, bookshelf, bedstead* are cohyponyms while their superordinate term is *furniture*. You should find other examples to practice and you will find it very interesting, almost like a game.

Hyponymy is the relationship which exists between specific and general lexical items, such that the former is included in the latter. The set of terms which are hyponyms of same superordinate term are co-hyponyms. Take for example the lexical items *cow* and *animal*. 'this is a cow‘ and 'this is a *buffalo*

unilaterally entail 'this is an *animal*'. The relationship existing between *cow* and *buffalo* with animal is hyponymy and cow and *buffalo* are co-hyponyms. One sense is a hyponym of another if the first sense is more specific, denoting a subclass of the other.

car is a hyponym of *vehicle*
dog is a hyponym of *animal*
mango is a hyponym of *fruit*

If X is a hyponymy of Y, conversely, we can say Y is a hyperonymy of X.

vehicle is a hyperonym/superordinate of *car*
animal is a hyperonym of *dog*
fruit is a hyperonym of *mango*

Hyperonymy is more formally extensional. The class denoted by the superordinate extensionally includes the class denoted by the hyponym. Hyponymy is frequently discussed by logicians in terms of class inclusion (Lyon, 1977) . For example, if X is the class of flowers and Y is roses, then it is in fact the case that X properly includes Y (X⊂Y Y ⊅X) i.e. flowers ⊂ roses and roses ⊅flowers. But there are problems attaching to the definition of hyponymy in terms of the logic of classes. First of all it is unclear whether we should say that a hyponym is included in superordinate or a superordinate in its hyponym(s). If we consider the extension of lexemes, we would say that a superordinate lexeme is more inclusive; but as for the intension of lexeme is concerned the hyponym is more inclusive (roses have all the defining properties of flowers, and certain additional properties which distinguishes them from tulips, daffodils, etc.).

Hyponymy is definable in terms of unilateral implications. For example, 'She is wearing a rose' implies 'She is wearing a flower' , but 'She is wearing a flower' does not implies 'She is wearing a rose'. If hyponyms are unilateral and non-symmetrical, synonyms are bilateral or symmetrical.

Hyponyms is a transitive relation. If X is a hyponym of Y and Y is a hyponymy of Z, then X is the hyponym of Z. For example cow is a hyponymy of 'mammal' and 'mammal' is a hyponym of 'animal'; therefore 'cow' is the hyponym of 'animal'.

Hyponymy is often defined in terms of entailment between sentences which differ only in respect of the lexical items being tested (Cruse, 2000:151): *'It is an appl*e' entails *'It is a fruit*'; but *'It is a fruit*' does not entails *'It is an apple*'; similarly *'Raja slapped Radha'* entails *'Raja hits Radha'*; but *'Raja hits Radha'* does not entail *'Raja slapped Radha'*.

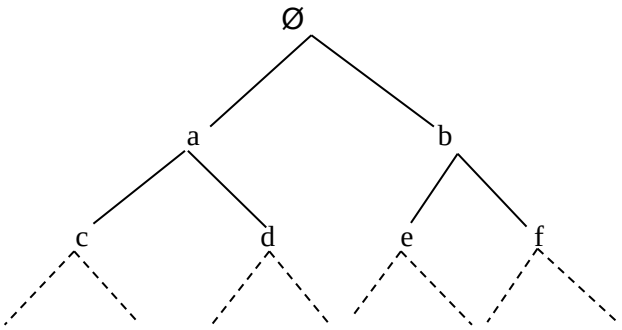
The concept of hyponymy can be expressed in ordinary language as X is a type/kind/sort of Y. It is interesting that some pairs of words that satisfy the logical definition of hyponymy collocate more acceptably in this frame than others (Cruse, 2000:152):

A horse is a type of animal.
?A kitten is a sort of cat. (A kitten is a young cat)
?A stallion is a type of horse. (a stallion is a male horse)
?A queen is a kind of woman. (A queen is a woman)

Cruse (1986) calls the relation between *stallion* and *horse* as taxonymy distinguishing it from the relation between *horse* and *animal*.

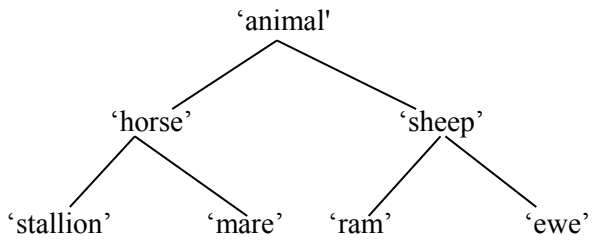
Hierarchical structure in the vocabulary

The relation of hyponymy imposes hierarchical structure upon the vocabulary and upon particular fields within the vocabulary; and the hierarchical ordering of lexemes can be represented formally as a tree-diagram, as illustrated schematically in figure given below.



In the diagram a, b, c, d, e, f stand for individual lexemes. And the point of origin or root of the tree is labeled zero (Ø). Two branches are shown issuing from each node. But this is appropriate only for co-

hyponyms related by opposition. The broken lines show further branches of the tree. As we have seen, hyponym is transitive. So any lexeme is a hyponym of any other lexeme that dominates it on the tree. We can say that a immediately dominates c and d. By virtue of this a is the immediate superordinate of c and d, and c and d are immediate hyponyms of a. We can consider the tree diagram as one presented in the figure reflect the structure of the vocabulary or parts of the vocabulary. But this implies many presumptions. For example, 'horse' and 'sheep' are immediate co-hyponyms of 'animal'; 'stallion' and 'mare' immediate hyponyms of 'horse; 'ram' and 'ewe' are immediate co-hyponyms of 'sheep'. But the principle of differentiation is not kept constant; the relation between 'horse' and 'stallion' and 'mare' is different from the relation between 'sheep' and 'ewe' and 'ram'. So, bring down the entire set of animals in the hierarchical fashion is a difficult job and it needs a lot of compromises.



The fact that lexemes, in most languages at least, fall into a number of distinct parts of speech would of itself preclude the hierarchical ordering of the vocabulary in terms of hyponymy under a single lexeme. For a lexeme belonging to one part of speech cannot be a hyponymy of a lexeme belonging to another part of speech. The vocabulary of a language is structured hierarchically in terms of hyponymy under several different points of origin, each one associated with a particular part of speech or some major subclass of one of the parts of speech is a plausible notion, though not a real possibility. There is no support in the lexical structure of any language for the view that all nouns denoting animate beings are hierarchically ordered, in terms of hyponymy, as a single class. If we include quasi-hyponym with hyponymy as a relation in terms of which vocabularies are structured hierarchically, the hypothesis that the vocabulary in all languages is structured hierarchically under a relatively small set of lexemes of very general sense is rather possible. It is a hypothesis, however, which is difficult to evaluate on the basis of the evidence that is at present available (Lyons, 1977:299) .

3.2.3.3. Meronymy and Holonymy

Meronymy-Holonymy relation is otherwise know by the term 'part-whole' relation. It is different from hyponymy-hyperonymy relation discussed above. For example we can say that 'arm' is the meronym of

the holonymy body; similarly, 'wheel' is the meronym of the holonym 'bicycle'. That is, the relation between 'arm' and 'body' is called meronymy; and conversely the relation that holds between 'body' and 'arm' is known as holonymy; similarly the relation that holds between 'wheel' and 'bicycle' is meronymy and the relation between 'bicycle' and 'wheel' is holonymy,

The distinction between meronymy-Holonymy relation and homonymy-hyperonymy relation is clearly distinct in most cases. We cannot say 'arm is a kind of body' or 'wheel is a kind of bicycle'. We have to say 'arm is a part of a body' and 'wheel is a part of a bicycle.

The part-whole relationship which holds between physically discrete referents is clearly transitive: if something X is a part of something Y which is a part of something Z, then X is always describable as a part of Z. For example, if finger is a part of an arm and arm is the part of a body, then finger is a part of a body.

The fact that one entity may be described as a part of another entity does not imply, however, that there is a part-whole relation holding in the vocabulary between the lexemes used in expressions which refer to these entities. For example we can say 'handle is a part of a door' and 'door is a part of a house'; but it is odd to say 'handle is a part of a house' or 'this is house-handle' or 'this the handle of the house'. We might therefore inclined to set up a part-whole relationship between 'handle' and 'door' and between 'house' and 'door', but not between 'handle' and 'house'.

An entity could be a meronym of part of different holonyms. For example, a door could be a part of a house as well as a car. Similarly, a wheel could be a part of a bicycle, bus, car, cart etc. In this context one could argue that the part-whole relationship is irrelevant for linguistic semantics. But, there are, however. numerous lexemes is the vocabularies of languages whose meaning cannot be specified independently of some part-whole relation (Lyons, 1977:314).

The difference between hyponymy and part-whole relations is clear enough in cases like 'arm': 'body', 'wheel': 'bicycle'; i.e. when the lexemes in question are nouns denoting discrete physical objects. Most of the discussion of part-whole lexical relations by linguists has been restricted to such cases.

X consists of/is composed of Y is to distinguished form hyponymy-hyperonym relation and part-whole relation. The following examples will illustrate this:

1.aThe substance consists of /is composed gold.

1b. This substance is gold.

*2a. The animal consists of/is composed of a cow.

2b. The animal is a cow.

3a. This body consists of an arm.

*3b. This body is an arm.

Mention should also made here about various kinds of collectives such as 'cattle', 'clergy', 'furniture', 'herd', 'flock', 'family', 'library'. Collective nouns are defined, semantically, as lexemes which denote collections or groups of persons or objects. In English, they fall into a number of different grammatical classes. For example, 'cattle' and 'clergy' are treated as plural and 'furniture' as singular. We are concerned herewith the place occupied by collectives in the structure of vocabulary. Many of them serve as superordinates in relation to a set of quasi-hyponyms. For example, 'cattle' is a superordinate to {'cow', 'bull', 'steer', etc} and 'clergy' is superordinate to {'bishop', 'priest', etc.}. There are many such collectives in the vocabulary of English and other languages which are superodinate to sets of lexemes in a hierarchical relationship that is ambivalent with respect to the distinction of hyponymy and the part-whole relation.

3.2.3.4. Compatibility

The lexical items which overlap in terms of meaning and do not show systematic include-included relation and have some semantic traits in common, but differ in respect of traits that do not clash are said to be compatible. Take for example the words *dog* and *pet*. A dog could be a pet, but neither all pets are dogs nor all dogs are pets. The relationship existing between *dog* and *pet* is compatible.

Two varieties of compatibility can be distinguished: strict compatibility and contingent compatibility (Cruse, 1986: 93). X and Y are strict compatible if they have at least one shared hyponymy or hyponymous expression which is independently charactrizable. Take the case of *snake* and *poisonous creature*. *It is a snake* neither entails *It is a poisonous creature* nor *It is not a poisonous creature*. Likewise, *It is a poisonous creature* is logically independent of *It is a snake*. *Snake* and *poisonous creature* are strict compatibles because *adder* and *cobra*, for instance, are hyponymous to both. Contingent compatibility is more common. It is exemplified by *dog* and *pet*: every dog is, in principle, a potential pet. There is no independently characterisable subclass of dogs for which being a pet is a

necessary or canonical trait; nor are there distinguishable sub-types of pet which are canonically or necessarily dogs.

3.2.4. Paradigmatic sense relations of exclusion and opposition

3.2.4.1. Incompatibility

Incompatibility refers to sets of items where the choice of one item excludes the use of all the other items from that set. Take for example the words *cat* and *dog*, *'it is a cat'* can entail *'it is not a dog'*. The relation existing between CAT and DOG is incompatible. Both come under the superordinate term *animal*. Thus the incompatible items can be co-hyponyms of a superordinate item, that is items which are in incompatible can be related to one another by hyponymous relation. There are certain parallels between incompatibility and compatibility. Like 'mere' compatibility, 'mere' incompatibility is relatively little interest. The fact that *affix* and *volcano* are incompatibles is not a special information. However, a special significance attaches to set of incompatibles which fall under superodinate: *animal: cat, dog, lion, eleph*ant, etc. All kinds of oppositions can be included under incompatibility.

3.2.4.2. Opposition and contrast

Structural semantics has emphasized the importance of paradigmatic opposition from the very beginning. The standard technical term for oppositeness of meaning between lexemes is antonymy. But antonymy cannot cover all the sense relations dealt under oppositeness. By definition antonymy is a narrow term for encamping all the aspects to be dealt under oppositeness. Senses that are opposites with respect to one feature of their meaning, otherwise, they are very similar. Antonymy is generally restricted to the pairs of If the opposition is between two lexical items, it is called binary opposition and if the opposition is between many lexical items it is called many-member opposition. Antonymy is generally restricted to the pairs the following: dark: light, short: long, hot: cold, up: down. More formally antonyms can be define as a binary opposition at the opposite ends of a scale (*long: short, fast: slow*).

3.2.4.2.1. Gradable and ungradable opposites

Grading involves comparison. When we compare two or more objects with respect to their possession of a certain property (typically denoted by adjectives) is usually appropriate to enquire whether they have this property to the same degree or not. For example, We may say 'X is as hot as Y' or 'X is hotter than Y' or 'X is the hottest of all'. But a lexeme like 'female', on the other hand, is non-gradable. That is we

normally don’t say 'X is as female as Y' or 'X is more female than Y'. So we can say that hot: and cold are gradable opposites, whereas female and male or non-gradable opposites.

3.2.4.2.2. Complementaries

Ungradable opposites, when they are employed as predicative expressions, divide the universe-of-discourse into two complementary subsets. For example the opposites male and female are complementaris. 'X is female' implies 'X is not male' and 'X is not female' implies 'X is male'. Of all varieties of opposites, complementary is perhaps the simplest conceptually. The essence of a pair of complementaries is that between them they exhaustively divide some conceptual domain into two mutually exclusive compartments. so that what does not fall into one of the compartments necessarily fall into the other. There is no 'no-man's island', no neutral ground, no possibility of a third term lying between them. Examples of complementaries are: true: false, dead: alive, open: shut, hit: miss, pass: fail, male: female.

3.2.4.2.3. Privative and equipollent antonyms

Cutting across the distinction between antonyms and complementaries is the distinction that many structural semanticists draw between privative and equipotent opposites. A privative opposition is a contrastive relation between two lexemes, one of which denotes some positive property and the other of which denotes the absence of that property. e.g., 'animate': 'inanimate'. An equipollent opposition is a relation in which each of the contrasting lexemes denotes a positive property: e.g., 'male': 'female'.

3.2.4.2.4. Contradictories and contraries

With gradable opposites, however, the situation is different. The predication of one implies the predication of the negation of the other: the proposition 'X is hot' implies 'X is not cold'. and 'X is cold' implies 'X is not hot'. But 'X is not hot' does not generally imply 'X is cold'. The distinction between gradable and ungradable opposites can be equated with the traditional logical distinction between contradictories and contraries. The distinction of contradictories and contraries corresponds to the distinction of ungradable and gradable lexemes within the class of lexical opposites in a language.

3.2.4.2.5. Distinction between Contrast, opposition, antonymy and complementaries

Contrast will be taken as the most general term, carrying no implication of the number of elements in the set of paradigmatically contrasting elements. Opposition will be restricted to dichotomous or binary contrasts; and anonymy will be restricted still further to gradable opposites such as big: small, high: low, etc. Lyons, 1977: 279). The ungradable opposites like male and female will be termed complementaries.

3.2.4.2.6. Converseness

To be distinguished from antonymy and complementarity is converseness. It can be exemplified by the pairs like 'husband': 'wife'. The statement 'X is the husband of Y' implies 'Y is the wife of X'. The active-passive opposition can be taken under converseness. The statement 'X killed Y' implies 'Y was killed by X'. Converse relation can be extended to two-place predicate relations existing in reciprocal social roles and kinship terms on the one hand and temporal and spatial relations on the other hand.

Converse pairs of social roles

e.g., doctor: patient, master/mistress: servant

Converse pairs of Kinship terms

e.g., father/mother: 'son'/'daughter

Converse pairs of Temporal relations

e.g., before: after, earlier: later

Converse pairs of Spatial relations

e.g., in front of : behind, above: below

The relation between 'buy' and 'sell' are more complex. They are three place predicates involving subject, object and indirect object. 'Buy' is a three-place converse of 'sell'. 'X buys Y from Z' implies ' Z sells Y to X'. These expressions can be symbolically represented as 'buy' (X,Y,Z) ≡ 'sell' (Z,Y,X).

3.2. 4.2.7. Directional, orthogonal and antipodal opposition

You have been instructed about three kinds of opposition: antonymy, compatibility and converseness. There is yet a fourth type, with various subtypes, which is sufficiently important in language. This is called directional opposition. Directional opposition hold between word pairs such as 'up': 'down', arrive: depart, and come: go.

Another distinction to be drawn is orthogonal and antipodal opposites (Lyons, 1977: 282). If we consider the oppositions which hold within the set {'north', 'south', 'east', 'west} we see that they are of two kinds. Each of the four members of the set is opposed orthogonally (i.e. perpendicularly) to others and antipodally (i.e. diametrically) to one another.

Directional opposites

e.g., 'up': 'down', 'arrive': 'depart', and 'come': 'go'

Orthogonal opposites

e.g. 'north': 'east' and 'west'; 'east': 'south' and 'north'

Antipodal opposites

e.g. 'north': 'south'; 'east': 'west'

Antipodal opposition is not confined to location or orientation in physical space, It operates in the areas of colour, kinship, etc.

3.2.4.2.8. Non-binary contrasts

There are oppositions in which the contrast exists between more than two entities. For examples the contrast exist between names of week days, months show non-binary contrast as there are more than two elements involved in the set of contrasting terms.

{Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday}

{January, February, March, April, May, June, July, August, September, October, November, December}

{rose, tulip, lotus, jasmine, etc.}

The relationship of sense which hold between lexemes in many member sets such as {Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday, Sunday} may be described as incompatibility.

Various kinds of ordering are found in many-member sets of incompatibles: by a many member set, in this context, means a set which contains more than one lexemes. Such sets may be serially or cyclically ordered. In a serially ordered set there are two outermost members and all other lexemes in the set are ordered between two others; in a cyclically ordered set every lexeme is ordered between two others. Among serially ordered sets, scales may be distinguished from ranks according to whether the

constituent lexemes are gradable or not. The ordering in scales in terms of incompatibility is characteristically less strict than it is in ranks. Ranks exhibit the principle of serial ordering in a stricter form. For example, the examiners adopt a serial ordering of ranks in a stricter form. e.g. {'excellent', 'good', 'average', 'fair', 'poor'}. The set of lexemes used to describe differences of military rank provides another example. Numerals also constitute a rank.

Cyclical sets or cycles

e.g. {spring', 'summer', 'winter'}; {January, …. 'December'}; {'Sunday',…, 'Saturday'}

Scales

e.g., {'excellent', 'good', 'fair', 'poor', 'bad', 'atrocious'}; {hot, 'warm', 'cold'}

Ranks

e.g., {'field marshal', 'general', … 'corporal', 'private'}; {'one', 'two', ... 'twelve'…, 'hundred', 'thousand', 'million', 'billion'…}

LEARNING ACTIVITY 3.2.

(1) Describe the paradigmatic relations of identity.

(2) Explain the paradigmatic relations of inclusion.

(3) Describe the paradigmatic relations of exclusion and opposition

SUMMARY

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Cruse, D.A. 1986. *Lexical semantics*. Cambridge: Cambridge University Press.

Cruse, D.A. 2000. *Meaning in language: An Introduction to semantics and pragmatics*. Oxford: Oxford University Press.

UNIT 4

LEXICAL SEMANTICS II

CONTENT

4.1. Hierarchies

4.1.1 Taxonomic hierarchies

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OVERVIEW

The vocabulary of a language is not just a collection of words scattered at random throughout the mental landscape. It is at least partly structured, and at various levels. There are various modes of structuring. It is useful, at the outset, to distinguish two major types of structure, the linguistic and psycholinguistic. Linguistic structures in the lexicon are defined semantically in terms of meaning relations. Psycholinguistic structures are defined in terms of such properties as associative links, priming characteristics, and patterns of speech errors. These two approaches are complementary to one another.

Linguistic structures in the lexicon may have a phonological, grammatical, or semantic basis. Obvious examples of grammatical structuring are word classes (grouping of words according to their syntactic properties) and word families (set of words derived from a common root). Here we shall be concerned

with semantically defined structures, particularly those generated by sense relations, or sets of sense relations.

LEARNING OBJECTIVES

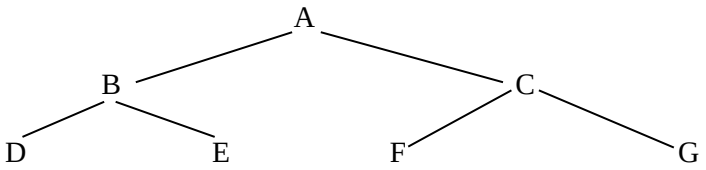
After the completion of this unit you able to understand

- semantic structuring under lexical configurations.
- two types of lexical configurations: hierarchies and propositional series.
- the different types of hierarchies such as taxonomic hierarchies and meronymic hierarchies
- non-branching hierarchies.
- propositional series or grids
- clusters

4.1. Hierarchies

A hierarchy, which need not consists of lexical items, is a set of elements related to one another in a characteristic way. Two structural types of hierarchy may be distinguished: those with branch, and those which, because of the nature of their constitutive relations, are not capable of branching. The two possibilities are illustrated diagrammatically in figures below (Cruse, 1986: 112):

Branching hierarchies

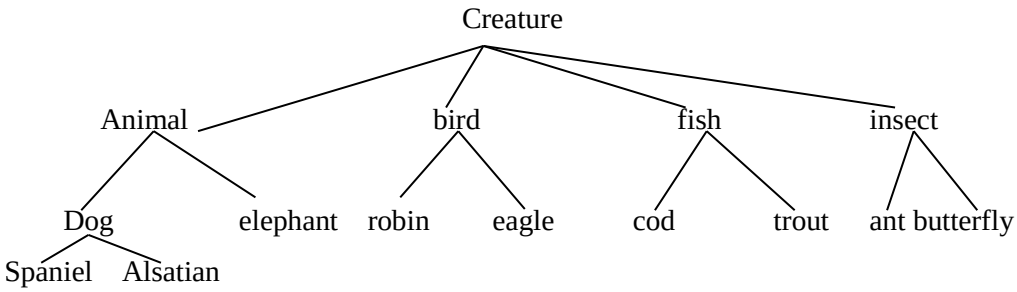


Non-branching hierarchies

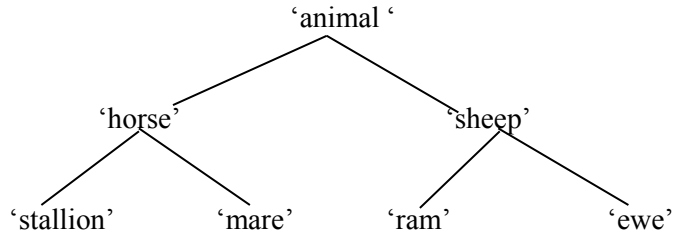
4.1.1. Taxonomic hierachies

4.1.1.1. Hyponymy and incompatibility

Consider the following fragment of a taxonomic hierarchy (Cruse, 1986: 136):

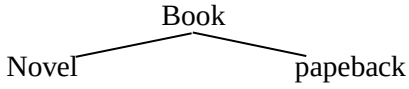


It seems fairly clear intuitively that two sense relations are essential to this configuration: daughter-nodes must be hyponymous of their respective mother nodes. (dog: animal, insect: creature, cod: fish); and sister nodes must be incompatibiles (cat: dog, robin: eagle, bird: fish). But the two prosperities (hyponymy and incompatibility) is not enough for a taxonomic hierarchy. Consider the following fragment of hierarchy.



In this, sister-nodes are strict incompatibles, and daughters are strict hyponyms of mothers. Yet it is not well-formed taxonomy. Intuitively one would say that the principle of differentiation has been held constant: the division of animals into sheep and horse is a different sort of division from that of ewe and ram. We must therefore inquire into the nature of the division which gives rise to well-formed taxonomies.

It is worth noting, too, that there is no inherent connection between hyponymy and incompatibility: two hyponyms of the same superordinate need not be incompatibles:



It would be more satisfying if we were able to characterize taxonomy in terms of a relation of dominance and a principle of differentiation which were more intimately related. This will be attempted here.

4.1.1.2. Taxonomy

Key to taxonomic lexical hierarchy is a sense relation which will be called 'taxonomy' (Cruse, 1986: 137). This may be regarded as a sub-species of hyponymy: the taxonomys of a lexical items are a sub-set of its hyponyms. Taxonymy (or more precisely, its converse) is a relation of dominance of a taxonomy: the corresponding horizontal relation - the relation between sister-nodes - will simply be labeled co-taxonymy, to underline the intimate connection between the two. A useful diagnostic frame for taxonymy is: An X is a kind/type of Y. If X is a taxonymy of Y, the result is normal:

a. A spaniel is a kind of dog.
b. A rose is a type of flower.
c. A mango is a type of fruit.

However, not all hyponyms give normal result in this frame:

a. ? A kitten is a type of cat.
b. ? A queen is a type of monarch.
c. ? A spinster is a kind of woman.
d. ? A waiter is a kind of man.

Unfortunately, the expression *kind of* is not univocal, and it is necessary to be able to recognize those senses which are irrelevant for the diagnosis of taxonymy. The diagnostic frames for co-hyponym which show most clearly the close relationship with taxonymy are:

An X is a kind of Y, and Z is another kind of Y.
An X is a kind of/type of Y, and so is a Z.

Recognizing taxonymy is one thing; describing its essential nature is another and more difficult task. It is not easy to discover invariable semantic properties which differentiate all taxonyms form other hyponyms.

4.1.1.3. Characteristics of natural taxonomies

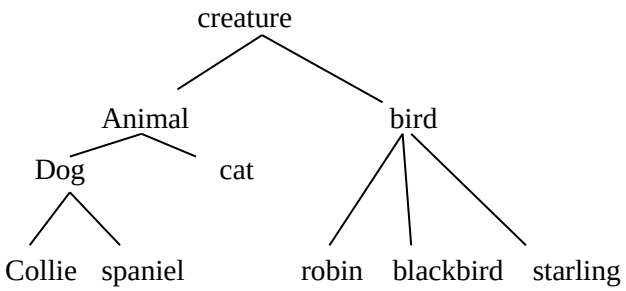
Taxonomic lexical hierarchies (taxonomies) have been extensively studied in a wide range of languages by anthropological linguists and other. The general characteristics of natural taxonomies emerge from these studies. One is that they typically have no more than five levels. The levels are commonly labeled as follows (Cruse, 1986:145)

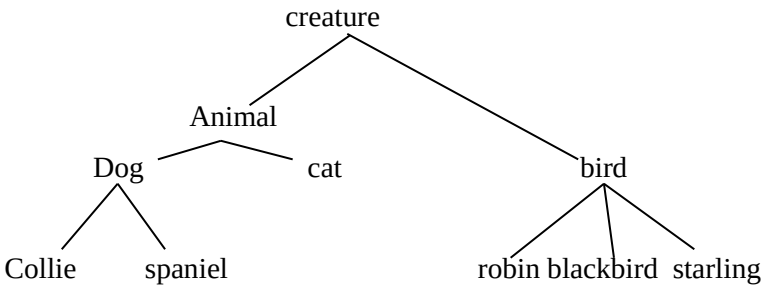
Unique beginner	(plant)
Life-form	(bush)
Generic	(rose)
Specific	(hybrid tea)
Verietal	(peace)

It will be noticed that the labels have a strong biological orientation. This is because ethnolinguists have been mainly interested in the way human communities classify living beings. There is no doubt, however, that lexical taxonomies occur throughout the lexicon. The limitation to a maximum of five levels is a characteristic of 'natural' or folk taxonomies. There also exist various specialist (e.g. technical or scientific) taxonomies. Some of the features of natural taxonomies (e.g. a limited number levels) do not appear to apply to them.

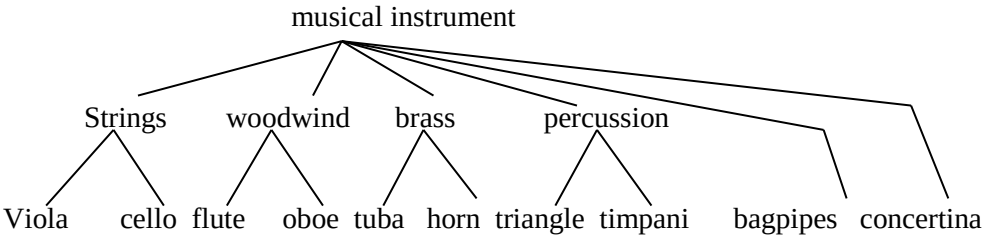
4.1.1.3.1. Lexical gaps and Covert category

The most significant level of a taxonomy from the point of view of the speakers of a language is undoubtedly the generic level. In an ideal hierarchy all branches have nodes at each level; in this respect natural taxonomies often fall short of the ideal. Consider the taxonomic systems of birds. The names of birds *like blackbird, robin* and *starling* are at the same level as *collie, spaniel* and *alsatin*; there taxonomies can be structured in two ways as given below (Cruse. 1986:146):





Given the psychological importance of the generic level, the most likely structure is the second one. Similar gaps can be found among taxonomies of artifacts. Musical instruments provide one such example (Cruse, 1986:147):



4.1.1.3.2. Proto-typical vs. peripheral member

The categories with no names, but for whose existence there is definite evidence, are called covert categories; they most frequently occur at the higher levels of a hierarchy. Distinction can be made

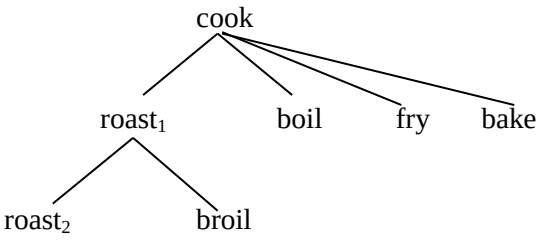
between prototypical member and peripheral member of a category. For example, ostrich is different form the prototypical bird; ostrich is considered as a peripheral member of a bird (Cruse 1986: 148-149).

4.1.1.3.3. Quasi-relations

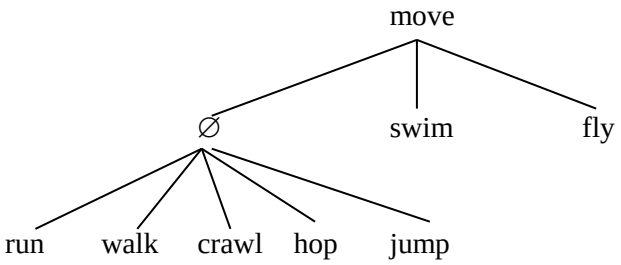
Quasi-relations are relatively common in taxonomic hierarchies. For example, the use of noun colour as quasi-subordinate of the set of colour adjectives (red, green, etc.) and shape as quasi-superordinate of the set of adjectives denoting geometrical shapes (round, triangular, etc.).

4.1.1.3.4. Overlapping of co-taxonyms

Co-taxonyms are expected to be incompatibles; that is to say, sister taxonomic categories are not expected to overlap. With nouns this is invariably the case, but it is possible to find apparent counter-examples among verbs. The verbs cooking shows such overlapping of co-taxonyms as illustrated below (Cruse 1988: 151)



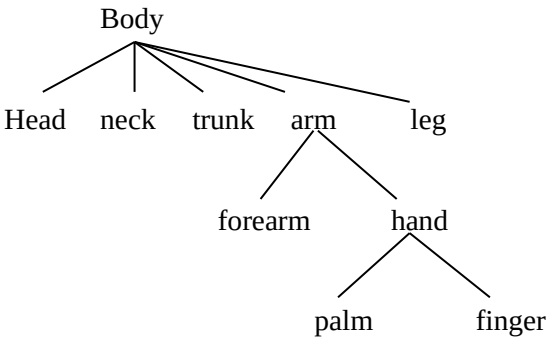
The simultaneous evidence of co-taxonymy and hyponymy strongly suggests that roast has two senses, *roast$_1$* being superodinate of *roast$_2$* and *broil*. Another example of overlapping co-taxonyms is to be found among the verbs of locomotion for living creatures as exemplified below (Cruse 1986: 151):



According to our intuition, there is a covert category in this hierarchy: there is no superordinate term for the verbs denoting locomotion on land.

4.1.2. Meronymic hierarchies

The second major type of branching lexical hierarchy is the part-whole type, which we call meronimies. The division of human body into parts serves as a prototype for all part-whole hierarchies (Cruse, 1986:157):



Nowadays the structural make-up of a complex artifact such as car forms a more significant prototype. The concepts of 'part' and 'whole' are of central importance to fully integrated an cohesive physical objects. The notion of 'piece' is different from that of 'part'. The semantic relation between a lexical item denoting a part and that denoting the corresponding whole is termed meronymy. The name co-meronymy is given to the relation between lexical items designating sister parts.

4.1.2.1. Defining meronymy

Meronymy is subject to a greater number of complicating factors than taxonomic relations are; instead of there being a single clearly distinguished relation, there is in reality a numerous family of more-or-less similar relations. The definition of meronymy, we propose here, is undoubtedly too restrictive, in that it excludes some intuitively clear examples of the part-whole relation; but it characterizes the central variety of the lexical relation: "X is meronymy of Y if only if sentences of the form *A Y has Xs/an X* and *An X* is a part *of a Y* are normal when the noun phrases *an X*, *a Y* are interpreted generically." (Cruse, 1986: 160). All word pairs which one would wish to recognize as having meronymic relation will yield normal

sentences in the test frame *A Y has Xs/anX*. The following examples will exemplify the definition (Cruse, 1986: 160):

A hand has fingers
A piano has a keyboard
A cars has wheels
A saw has teeth
A book has pages.

Although the two-part test gives a fair guarantee of a meronymic relationship in word pairs which satisfy it, it excludes intuitively clear cases of parts and wholes (Cruse, 1986: 161):

1a. ? A handle is a part of a bag.
1b.? A bag has a handle.
2a. A sepal is a part of a flower.
2b. ? A flower has sepal.
3a. A root is a part of a word.
3b. The word has a root.

A test frame which does not leak, and which accepts all the above cases, is: The parts of a Y include the X/Xs, the Z/Zs, etc (Cruse, 1986: 161).

The parts of a flower include the sepal, the petal, etc.
The parts of a word include the root…
The part of a door include the handle, the lock,…

Distinction is made between canonical meronym and facultative meronym. Finer is the natural or necessary part of hand; whereas handle is not a natural or necessary part of door. So *finger* is the canonical meronym of *hand* and handle is the facultative meronym of *door*.

4.1.2.2. Transitivity in meronymy

Hyponymy is an unproblematic transitive relation. It follows from the fact that a spaniel is necessarily a dog and dog is necessarily an animal. Taxonymy is less clear, but it seems better to treat it as intransitive. Meronymy is more complicated, as in most respects. Consider the following sentences (Cruse, 1986:165):

1a. The jacket has sleeves.
1b. The sleeves have cuffs.
1c. The jacket has cuffs.
2a. The house has a door.
2b. The door has a handle.
2c. ?The house has a handle.

Distinction has to be made between attachments and integral parts. The following examples will exemplify this (Cruse, 1986:167):

A hand is attached to an arm.
The handle is attached to the door.
The ear is attached to the head.
?The palm is attached to the hand.
?The handle is attached to the spoon.

The wholeness of an entity is destroyed if an integral part is missing, but it is not necessarily true if the missing part is an attachment. A part of an attachment does not count as a part of the stock; hence 'finger', for instance does not count as part of arm.

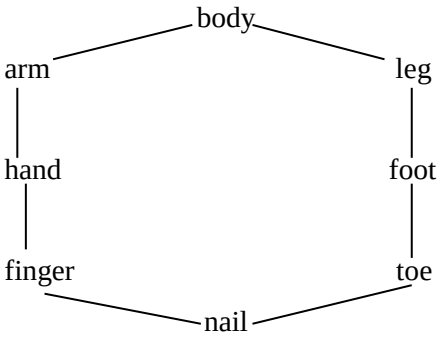
?An arm has fingers.
? A finger is a part of an arm.

4.1.2.3. Characteristics of meronomies

A well-formed part-whole hierarchy should consist of elements of the same general type. It is not immediately clear how to articulate this notion precisely, but it is easy to see that some such concept is necessary. If one element in a meronymy denotes a cohesive physical object, for instance, then all the other items in the set must too (for example 'weight' of a 'body' does not figure among its part); if one item denotes a geographical area, so must all the others; if one item is an abstract noun, all the others must

be as well - and so on. We have to make a distinction between segmental parts and systemic parts. We have seen well-formed taxonomic hierarchy must preserve a constant principle of differentiation throughout. This feature has a meronymic parallel. If we divide human body, we can divide it either into parts such as *trunk, head, limbs*, etc. or we can divide it in quite another way as *skeleton, muscles, nerves, blood vessels*, etc. Parts of the first type have a greater degree of spatial cohesiveness. They will be called segmental parts. Part of the second type has a greater functional unity, a greater consistency of internal constitution, but they are spatially inter-penetrating, running along the major axes of the body. They will be called systemic parts. A 'house' for instance may be divided into 'living room', 'dining room', 'kitchen', 'hall', bedroom', 'cellar', 'loft' etc.; or 'brickwork', 'joinery', 'plasterwork', 'plumbing', 'wiring', etc.

The relation of mernymy is not an ideal guarantor of a well-formed hierarchy, unlike taxonymy. The trouble arises out of the existence of super and hypo relations (Cruse: 1986:170).



In the corresponding extra-linguistic hierarchy there is, of course, no convergence, because 'finger nail' and 'toe nail' are different parts, but the same lexical item is used to refer them, so the lexical hierarchy does converge. A striking case of this is provided by the male and female human body. It is noteworthy that intersection between part-whole hierarchies is by and large a purely lexical phenomenon: actual sharing of parts between extra-linguistic wholes seems rare.

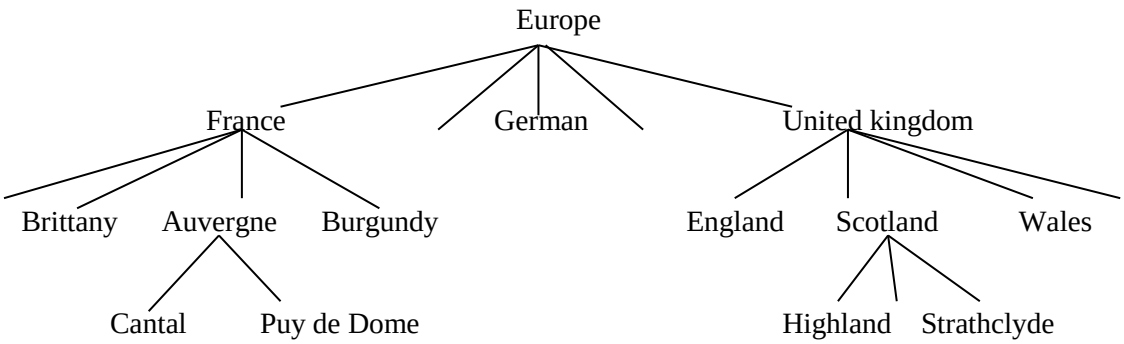
Meronomies typically have rather weakly developed substantive levels. The existence of gaps (i.e. covert category) was noted for taxonomic hierarchies. In the case of meronomies, the most inclusive term is never covert; there are no meronomies of unnamed wholes. One type of covert part does however occur relatively frequently: there often no separate name for the major, essential functional part, especially of

artifacts. Take for example of 'spoon'. A spoon has a 'handle', but what do we the other part, which corresponds to the blade of a knife? Another example is 'fork'. This also has a 'handle', but again there is no name for the rest.

4.1.2.4. Close relatives of the part-whole relation

We have seen so far the central or core instances of part and whole. But there are peripheral instances of part and whole which could be considered as close relatives of the core part-whole relation. A number of dimensions of variation can be identified which correlate with certainly and peripherally in part-like relations. One such dimension is concreteness: bodies, trees, cars and teapots concrete, one may speak of parts of non-concrete entities such as events, actions, processes, states and abstract notions like adolescence and courage. A second dimension of variation is the degree of differentiation amongst parts: the parts of body, or car, are highly differentiated; the parts of a team may or may not be clearly differentiated, but in general will be less so than the parts of a body; the parts of a unit of measure such as hour, metre, or pound are not differentiated at all. A third dimension of variation is structural integration: the members of a team are more integrated than the stones in a heap, or the books in a library, but are less so than part of the body. There are part-like relations where one or both terms are mass nouns: *The car is part of steel* (whole = count, part = mass); *Sand* consist of grains (whole = mass, part = count) ; *milk* is an ingredient of custard (whole = mass, part =mass).

The geographical division of countries shows part-whole like relation, as exemplified below (Cruse, 1986: 173):



They display some of the typical contextual properties of parts:

France is a part of Europe
The parts of Europe are: France, Belgium, Holland, etc.

There are cases which more closely approach the concrete part-whole pattern; the relation between capital and country is an example.

A capital is a part of a country.
A country has a capital.

Verbs give rise to event nouns such as activities, processes, actions and accomplishments, which have a temporal structure, can have systemic parts. The following exemplify this:

The most popular part of the show was dance.
The part of the show are: dance, …
The show has a dance.

Units of measure and their sub-units constitute a special class of abstract part-whole, one of whose characteristics is a total lack of differentiation.

Entities such as groups, classes and collections stand in relations which resemble meronymy with their constituent elements. We can establish relations such as group-member and class-member and collection-member relations respectively in them (Cruse, 1986: 176).

Group-member relation: e.g. tribe: tribesman, jury: juror/juryman, senate: senator
Class-member relation: e.g. proletariat: worker, clergy: bishop, aristocracy: duke
Collection-member relation: e.g. forest: tree, library: book, heap: stone

There is a family of relations involved with what things are made of, the part-like component being a mass noun denoting a substance or material. In cases where the whole is a mass noun we can speak of constituents or ingredients; the relation substance-constituents/ingredients can be established between them. e.g. *shortening*: *pastry*. In cases where the whole is a count noun, we have the object-material relation. e.g. *tumbler*: *glass*.

4.1.2.5. Meronomies and taxonomies

Meronomies and taxonomies show some principal resemblances and differences (Cruse, 1986:177). There is a fundamental difference between the two in the way that they relate to extra-linguistic facts. The terms of both types of hierarchy denote classes of entities. The classes denoted by the terms in taxonomy form a hierarchy. However, the classes denoted by the elements of meronymy - toes, fingers, legs, heads, etc. - are not hierarchically related; that is the hierarchical structuring of meronymy does not originate in a hierarchy of classes. It is rather the way the individual parts of each individual whole are related which generates the hierarchical structuring that forms the basis of a meronymy. A meronymy thus has closer links with concrete reality than taxonomy.

Meronymy must be considered a less well-defined relation than taxonomy. A Meronymy is less well-structured in that it does not often display clear levels; and it is typically less cohesive due to the frequency of super and hypo relations.

Although there are differences between meronomies and taxonomies, it is perhaps the similarities between them which are the more striking. Both involve a kind of sub-division, a species of inclusion between the entity undergoing division and the results of the division, and a type of exclusion between the results of the division. Any taxonomy can be thought of in part-whole terms: a class can be looked on as a whole whose parts are its sub-classes. Corresponding to each of the common nouns constituting a typical taxonomy, there exists a proper noun labeling the class as an individual. Thus alongside dog and cat we have species Dog and the species Cat. A taxonomy in this way be transformed into a meronomy, demonstrating that there is a intimate connection between the two. Distinctness in classes means unshared attributes; in parts it means unconnectedness. This dual principle works quite well for both meronymy and taxonomy and expresses in a satisfying way the close between the two.

LEARNING ACTIVITIES 4.1.

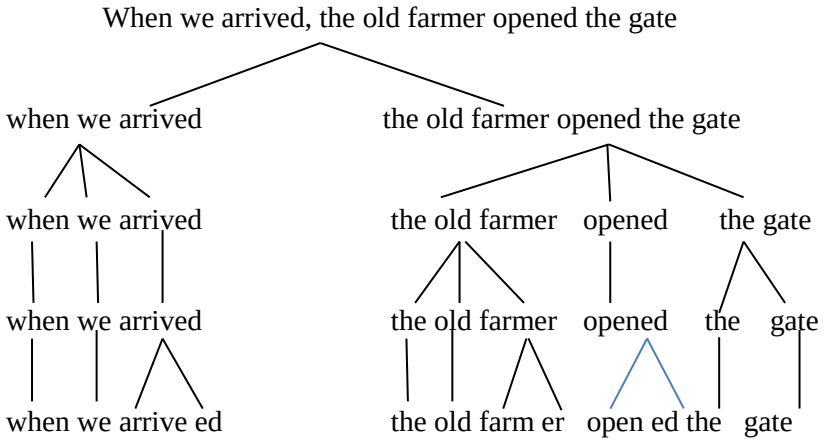
(1) What is meant by semantic structuring under lexical configurations.
(2) What are the two types of lexical configurations?
(3) Differentiate taxonomic hierarchies from meronymic hierarchies

4.2. Non-branching hierarches

Non-branching fall into two major types (Cruse, 1986:181). First, there are those which are closely bound up with branching hierarchies - they can, in fact regarded as secondary derivations from them. Second, there is a quite a large family of independent non-branching hierarchies, not derived from or connected in any way with branching hierarchies, which arise from non-differentiable relations of dominance.

4.2.1. From branching to Non-baranching

A branching hierarchy can only serve as the basis for a non-branching hierarchy if it has well-defined levels. The following tagmemic analysis (a type of grammatical description) of a given sentence will illustrate all the theoretical assumptions behind the hierarchy (Cruse, 1986: 181-182):


When we arrived, the old farmer opened the gate
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the old farmer opened the gate
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the old farmer opened the gate
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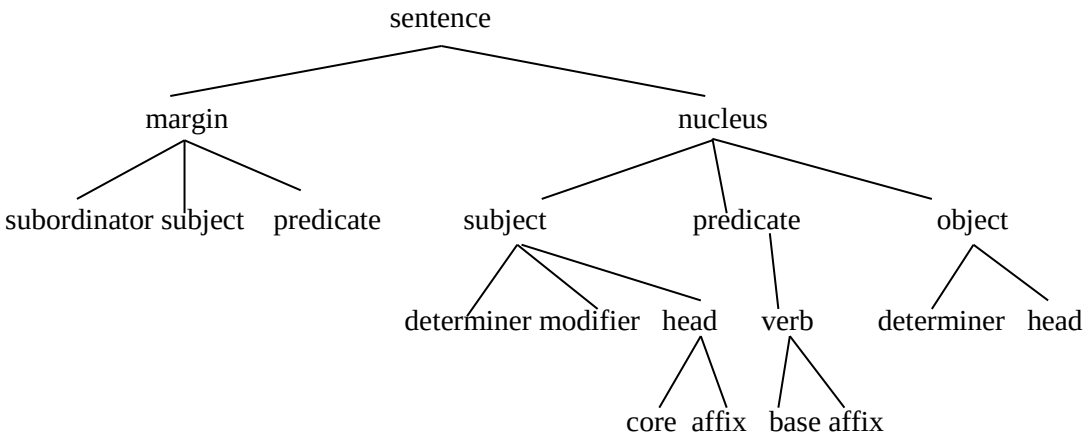
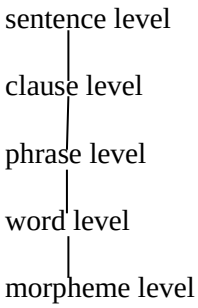
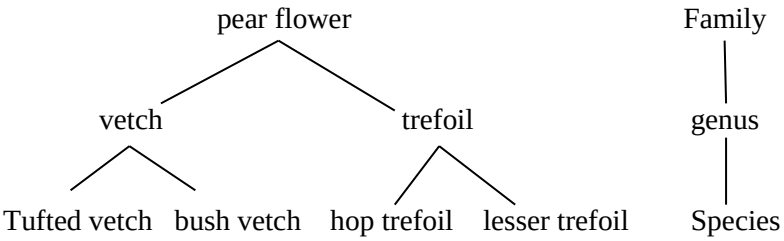
the old farmer opened the gate
when we arrive ed
the old farm er open ed the gate



Corresponding to the hierarchies in the above figures is the following non-branching hierarchy (Cruse 1986: 183)



This method of producing a non-branching hierarchy is available for all branching hierarchies with levels. A botanical taxonomy, for instance, yields the following (Cruse 183-184):



Another way of deriving a non-branching hierarchy from a branching one is to suppress differentiation and provide a single superordinate at each level for all the items at that level. Corresponding to the levels in the taxonomic analysis illustrated above, we also have the following series of common nouns:

Sentence
|
Clause
|
phrase
|
Word
|
morpheme

There is one type of hierarchy for which this method of deriving a non-branching string does not work, and that is a taxonomy. It is possible derive a non-branching lexical hierarchy from a branching extra-linguistic hierarchy, even when no branching lexical hierarchy corresponds to it. The names of military ranks form a non-branching hierarchy:

colonel
|
lieutenant
|
colonel
|
major
|
captain

4.2. 2. Chains, helices and cycles

There are many sets of lexical items which form non-branching hierarchies according to our criteria, but which bear no relation whatsoever to hierarchies of the branching sort. All that is needed for non-branching hierarchy is a principle of ordering which will enable the terms of the set to be arranged in a unique sequential order with a first item and a last item (Cruse, 1986:187). You can distinguish them as **inherently ordered** and **non-inherently ordered**.

(1) mound, hillock, hill, mountain (inherently ordered)
(2) mouse, dog, horse, elephant (non-inherently ordered)

There are two important semantic differences between the items in set (1) and set (2). The first is that in set (1) the semantic trait of "relative size" is the criteria for arrangement and in set (2) size is not the ordering criteria. The second difference between the two sets lies in the semantic relations holding between the members. The members of the second set possess common traits being animals and a multi-dimensional contrastive traits which distinguish one from other. Such natural traits are not found in the first set. Their contrasting trait is one-dimensional (size). The item in set do not merely form an ordered sequence; they also represent degrees of a graded property, namely size.

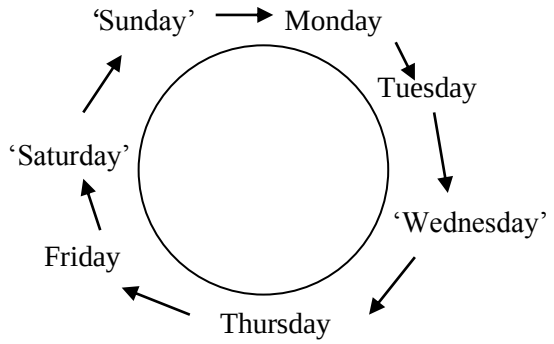
There are two principle modes of organization of such sequence: they may exhibit pure linear ordering in which case they will be called '**chains'** or they may have a hybrid linear/ cyclical ordering which we shall call **helical**. The following are the examples of lexical chains (Cruse 1986: 189).

Shoulder, upper arm, elbow, forearm, waist, hand
Source, upper reaches, lower reaches, mouth/estuary
Introduction, exposition, development, recapitulation, coda
Birth, childhood, adolescence, adulthood, old age, death

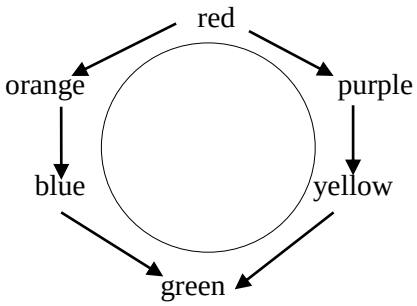
The set of lexical items which will be termed helices are a sub-type of chain. They show the typical characteristics of chains, with first term and a last term, and a unique ordering in between:

Sunday, Monday, Tuesday, Wednesday, Thursday, Friday, Saturday

In the sequence of week days the criteria for sequential ordering is with reference to a temporal dimension "comes earlier" vs. "comes later". We can organize these terms into an apparently cyclical structure (Cruse, 1986: 190).

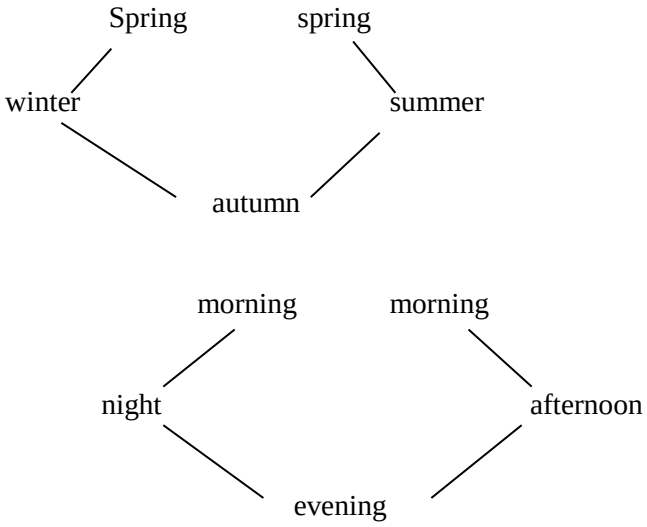


The same relation organizes the colours of a spectrum into a circle, too. But there is a difference. The colour-terms *red*, *orange*, *blue*, *green*, *yellow* and *purple* form what is perhaps the only truly cyclically organized set in the language (Cruse 1986: 190):



This set does not constitute a hierarchy: the structuring relation does not have the necessary directional properties. There is no top, and no bottom; There is no unique item related in the relevant way to all the other items in the set. However the names of the days of a week do not really form a circle. In the sequence *Sunday, Monday, … Saturday, Sunday*, the first and the last items do not refer to the same day: in the course of each circuit, times moves forward one week. The combination of linearity and cyclicity may be taken as the defining characteristics of a **helix**.

The links of a **helical chain** typically refer to periods of time (Cruse 1986: 190):



The incidence of helical ordering in time expressions is perhaps a reflection of the human propensity for imposing a rhythmical structure on the flow time and arises from the same deep impulse as music and dance. The constituent items of helical chains may have precise boundaries (Monday: Tuesday, June: July) or vague boundaries (afternoon: evening, autumn: winter). None of the segmentation found in helical chains seems to be wholly unmotivated, although the repeat may be: the day, the lunar month and the year are 'natural' periods. Many cases show a combination of naturalness and arbitrariness: the day is a natural period related to the rotation of the earth about its axis, but the location of the point where one day passes into the next is arbitrarily imposed.

4.2.3. Ranks, grades and degrees

In a number of ordered sets the constituent lexical unit relate to different values of some variable underlying property. There are two distinct types of underlying scale: which vary continuously, and those which vary in discrete jumps. The lexical units which operate on a discontinuous scale will be called rank-terms. Terms which operate over a continuous scale may be gradable; the non-gradable ones will be called degree-terms and the gradable ones ‘grade-terms’. There are many sets of lexical items which encapsulate numbers, especially units: they are all ranks too (Cruse, 1986: 192):

First, second, third, fourth, fifth, sixth
half, third, quarter, fifth, sixth…
Twins, triplets, quadruplets, quntuplets, sextuplets…
Monadic, diadic, triadic, tetradic, pentadic

Triangle, square, pentagon, hexagon
Single, double, treble

It could be argued that some types of measure unit, particularly those of distance and time, have a connection with a branching part-whole hierarchy with no differentiation of parts. But we can relate them to a one-dimensional continuous scale, and categorize them as degree terms. They differ, however, from other types of degree-term. The degrees in a set usually represent a more or less linear progression in terms of values of underlying property, measure terms typically increase geometrically (again, more or less). For example, the terms *one, two, three, four; Monday, Tuesday, Wednesday, Thursday; fail, pass, credit, distinction; and baby, child adolescent, adult* all represent either equal or roughly equal intervals along their respective scales. But *second, hour, day; millimeter, centimeter, kilometer; ounce, pound, stone, hundred-weight, ton;* and *hundred, thousand, million, billion* increase geometrically (again roughly).

Grade terms differ from degree-terms in that they are gradable. They are therefore mostly adjectives. The following are examples of sets of grade-terms (Cruse, 1986: 194).

freezing, (cold, cool, warm, (hot), scorching
atrocious, (bad), indifferent, average, fair, (good), excellent
minuscule, tiny, (small), (big), huge, gigantic

4.2.4. Linear structures

Cruse (2000: 189) uses the term **linear structures** in the place of non-branching hierarchies. He makes a three way distinction: **bipoles**, **bipolar chains** and **monopolar chains**.

4.2.4.1. Bipoles

The bipoles is the simplest kind of linear structure found in a pair of opposites. They are simply oppositions which we have discussed earlier (Cruse, 2000: 189).

4.2.4.2. Bipolar chains

The bipolar chains have implicit superlative terms of opposite polarity at each end of the scale. The following is the example (Cruse, 2000: 189):

minuscule, tiny, small, large, huge, gigantic

4.2.4.3. Monopolar chains

According to Cruse (2000:190), in **monopolar chains**, there is no sense that the terms at the ends of the chain are oriented in opposite directions. Degree, stages, measures, ranks and sequences are dealt under monopolar chains. This system largely follows Cruse (1986).

4.2.4.3.1. Degrees

According to Cruse (2000:190), degrees incorporate as part of their meaning different degrees of some continuously scaled property such as size or intensity, but there is no relation of inclusion. The following are the examples:

fail, pass, distinction
mound, hillock, hill, mountain

4.2.4.3.2. Stages

Stages are points in a lifecycle of something and normally involve the notion of progression Cruse (2000:190). The following are the examples:

primary, secondary, undergraduate, postgraduate
infancy, childhood, adulthood, old age
egg, larva, pupa, butterfly

4.2.4.3.3. Measures

Measures are based on a part-whole relationship, with each whole divided into a number identical parts: there is typically a geometrical relationship between values of the scaled property designated by adjacent terms (Cruse 2000:190):

second, minute, hour, day, week, month (etc)
inch, foot, yard (etc) mile
ounce, pound, stone (etc) ton

4.2.4.3.4. Ranks

In ranks, the underlying property does not vary continuously, but in discrete jumps; there is none the less something that a term has more or less of than its neighbours (Cruse 2000:190):

lecture, senior lecture, reader, professor
private, corporal, sergeant

4.2.4.3.5. Sequences

Sequences are also ordered terms, but there is no property of 'more or less' with regard to the neighbouring terms (Cruse 2000:190).

Monday, Tuesday, Wednesday, Thursday
January, February, March, April
Spring, Summer, Autumn, Winter
morning, afternoon, evening, night

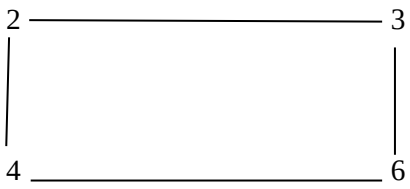
4.2.5. Propositional series/Grids

The simplest propositional series consists of a single 'cell', which has four elements (Cruse, 1986:118):

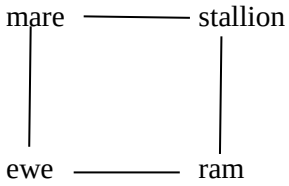
The relation between the elements must be such that from any three of the elements the fourth can be uniquely determined. The configuration is thus structured by the following relations of proportionality:

A is to B as C is to D
B is to A as D is to C
A is to C as B is to D
C is to A as D is to B

The quintessential proportionalities are, of course, numerical:

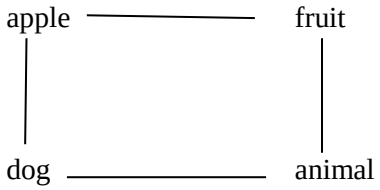


but lexical analogues of these are common.



Mare is to stallion as ewe is to ram.
Stallion is to mare as ram is to ewe.
Mare is to ewe as stallion is to ram.
Ewe is to mare as ram is to stallion.

The following configuration does not constitute a proportional series according o the above definition.



Cruse (2000: 191) introduces the term, **grids** instead of proportional series. According to Cruse (2000: 191), grids are generated by recurrent sense relations. The unit of grid is the cell, which consists of four lexical items, any one of which must be uniquely predicable form the remaining three. The following examples are examples of cells.

man: woman	hand: finger	dog: puppy	take: steal
ram : eve	foot: toe	cat: kitten	kill: muder

According to Cruse (2000: 191) the following is not well formed cell.

flower: tulip
animal: cat

4.2.6. Clusters

According to Cruse (2000: 193), clusters are essentially group of synonyms. There are two main types of clusters: the centered clusters and non-centered clusters. In the case of centered clusters there is more-or-less core item.

e.g. die, pass away, pop off, disease, breathe one's last, kick the bucket. die

In the above given example, clearly there is a core member. In non-centered clusters, there is no superordinate item.

e.g. rap, tap, knock, slap, thwack, crack, bang, bump, pop, tick, click, ring, tinkle, clink, clang, jingle, jangle, ping…

In the above given example, there is no core or superordinate item.

4.2.7. Miscellaneous types

Cruse (2000: 177) makes use of the term word fields to cover the structure of the lexical items discussed under this unit. He also mentions about other important grouping of words, for which the notion of structure seems less appropriate. He talks about two types of examples. The first is so-called word families. There are words derived from a common root like cook (v), cook (n), cookery, cooker, cooking (n), etc. These words can be considered as a group. Second, there are groups of words which can be labelled as register, as in colloquial or formal use, or by field of discourse such as vocabulary appropriate for a religious sermon, a legal document, or a medical textbook,

LEARNING ACTIVITIES 4.2.

(1) What are different types of non-branching hierarchies.
(2) Differentiate between chains, helices and cycles with suitable examples.
(3) Differentiate bipolar chains from monopolar chains.
(4) Explain how degrees, ranks and sequences are different form one another.
(5) What is meant by propositional series?
(6) Explain how propositional series or grids can be used to structure vocabulary.
(7) What are the two types of clusters?
(8) Differentiate the two types of clusters with suitable examples.
(9) What is meant by register? Explain the different kinds of registers.

SUMMARY

You have observed that words may not be profitably analysed through their reference or comportments. This observation has favoured the relevance on the sense relations holding among words. In this Unit, you have studied the meaning of words from the perspective of sense relations with emphasis on the following Synonymy, Hyponymy-hyperonymy, meronymy-holonymy, opposition and contrast. You have also studied each of these concepts with examples. Different types of lexical configuration such as hierarchies, taxonomies, meronomies and non-branching hierarchies have been introduced with suitable illustrations.

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Unit 5

COMPONENTIAL ANALYSIS OF MEANING

CONTENT

5.1. Componential analysis

5.2. Background to componential analysis

5.3. How does the theory of meaning components work?

5.3.1. Components of meaning

5.3.2 Componential analysis of meaning

5.3.3 Analysing and Distinguishing Meanings

5.4. Procedural steps in the componential analysis of meaning

5.5. Linguistic basis for componential analysis

5.6. Contribution to the study of meaning

5.7. Basic difficulties encountered in the analysis of semantic components

5.8. Applicability and universality

5.9. Apparent advantages of componential analysis of meaning

5.10. Strength and weakness

OVERVIEW

There are many different ways to approach the problems of meaning, since meaning is related to many different functions of language. The meanings of words in a language are interrelated and they are defined in part by their relations with other words in the language. Analyzed in the same semantic domain, words can be classified according to shared and differentiating features. Breaking down the sense of a word into its minimal distinctive features, componential analysis of meaning can be a useful approach in the study of meaning, particularly in determining the meaning of a lexeme. Although componential analysis has some difficulties and limitations in its application, it is still used in modern linguistics.

LEARNING OBJECTIVES

After completing this Unit, you should be able to:

- understand the principles of componential analysis of meaning.
- apply the theory of componential analysis of meaning for the analysis of your mother tongue.
- understand the difference between the relational semantics (discussed in the previous unit) and the componential analysis of meaning.

5.1. Componential analysis

Finegan (2004: 181-182) distinguishes three types of meaning, i.e. linguistic, social, and affective meaning. Linguistic meaning encompasses both sense and reference. One way of defining meaning is to say that the meaning of a word or sentence is the actual person, object, abstract notion, event, or state to which the word or sentence makes reference. Referential meaning may be the easiest kind to recognize, but it is not sufficient to explain how some expressions mean what they mean. For one thing, not all expressions have referents. Social meaning is what we rely on when we identify certain social characteristics of speakers and situations from the character of the language used. Affective meaning is the emotional connotation that is attached to words and utterances.

A word or lexeme presents a complex semantic structure. A lexeme is built up of smaller components of meaning which are combined differently to form a different lexeme. The meaning of a lexeme is a complicated structure where elements of meaning have definite interrelation (Crystal, 1987: 104). All semantic elements in a word are not equally important. One (or some) of them is the dominant semantic element and it organizes around itself all the other ones, which may be more or less important for the meaning of a lexeme (Lyons J, 1995: 108 and Leech, 1983: 89).

A lexeme can be analyzed and described in terms of its semantic components, which help to define different lexical relations, grammatical and syntactic processes. The semantic structure of a lexeme is treated as a system of meanings. To some extent we can define a lexeme by telling what set it belongs to and how it differs from other members of the same set. Some obvious sets of this sort are sports (*tennis, badminton, soccer, golf, basketball,…),* colors (*red, blue, yellow, green, pink,* …) and creative writing (*novel, poem, short story, essay, biography,…).* It is not difficult to say what the members of each set

have in common. According to Semantic field (or semantic domain) theory, lexemes can be classified according to shared and differentiating features. Here are more examples. *Wasp*, *hornet*, *bee* and other items denote 'flying, stinging insects'; *moth* and *housefly*, among others, denote insects that fly but do not sting; *ant* and *termite* are names of insects neither fly nor sting. The semantic features explain how the members of the set are related to one another and can be used to differentiate them from one another. The determination of such features has been called componential analysis (Kreidler, 2002: 87 and Wardhaugh, 1977:163).

The kind of analysis that uses a list of identified meaning components to define a word is often called componential analysis. This theory or semantic methodology is also called semantic primitives or semantic components. Thus componential analysis can be viewed as a privileged instrument of semantic analysis, or alternatively, as a particular semantic theory. However the theoretical background of componential analysis is also developed in certain respects. Under the view that semantic representation should involve semantic components, there is a group of authors that share the idea that these components are primitive elements which combine to form units at the level of grammar. It is the nature of combination that distinguishes the views adopted by the different authors. Katz and Fodor originally proposed a list of components. Jackendoff proposed a more articulated representation where components are arranged as functions and arguments which can be successively embedded within one another. Still others have held that semantic components help to characterize semantic relations, such as entailment. This idea of componentiality is very important and you will come across it in various parts of the your study.

LEARNING ACTIVITY5.1.

What is meant by componential analysis of meaning?

5.2. Background to componential analysis

Componential analysis (CA) or semantic decomposition has a long history in semantic description with roots in European structuralism (Saussure and Hjelmslev) and American anthropology. One important objective of componential analysis has been to achieve an effective reductive analysis of meaning. The Danish linguist Louis Hjelmslev, a representative of early European structuralism and a disciple of Saussure, applied Saussure's phonological principles to semantic analysis. Hjelmslev was probably the first to apply a componential program to semantic analysis since he believed that the meaning side of the

linguistic sign should show the same structuring principles as the sound side. What he seemed to have in mind was the discovery of a set of basic words, out of whose meanings all other word meanings could be constructed. This method, originally used to explain phonemic analysis, was based on commutation. A phonemic difference was said to exist between two different elements of the expression plane when substitution of one for the other entails a change in the content plane. For example, the voiced/voiceless difference between [p] and [b] leads to differences in the meaning of [pin] and [bin] whereas the aspirated bilabial stop in [ph] is not a different phoneme from the unaspirated [p] because a change of meaning is never associated with the choice of one rather than the other. This is exemplified by Cruse (2000: 244) applying the principle of symmetry to semantic analysis. The meaning of [mare] can be separated into components according to the following sequence: [HORSE] and [FEMALE] and if the second element is changed into [MALE] the resulting element in the plane of expression is then stallion.

There are several approaches to a componential view of meaning. They all share the idea that the meaning of a word is constructed out of smaller, more elementary, and invariant units of meaning. According to componential semanticists, the meaning of a word can be specified in isolation from the meanings of other words in a language. This is known as a localist view, which can be accounted for by rules of interaction with context. The opposite position is the holistic view, which holds that meaning cannot be known without taking into account the meanings of other words in a language. In one version of holism, influenced by Hass (1962, 1964) and Wittgenstein (972), meaning is closely related to use and, furthermore, the meaning of a word is related to the semantic field it belongs to. For Hass, the meaning of a word is its semantic field which, in turn, has two dimensions: a syntagmatic dimension, in which all possible (grammatically well-formed) contexts of the word were arranged in order of normality, and a paradigmatic dimension, in which for each context, the possible paradigmatic substitutes for the word were arranged in order of normality.

In the same vein, Lyons (1977, 1995) believes that the sense of a lexical item consists of the set of sense relations which the item holds with other items which participate in the same field. In his view, meanings are relational because they are constructed on the basis of contrasts within the same system. Lyons is an inheritor of Jespersen's view that there are notional universals in language which spring from the nature of extra-linguistic reality.

Componential analysis can also be traced back to the work of Katz and Fodor's (1963) who developed these theories apparently independently of the Structuralism in Europe and in close connection with anthropological linguistics' analysis of kinship systems. These authors designed their semantic theory as

part of a Chomskyan generative grammar. Theirs was a very ambitious three fold project: first it was part of a complete theory of language; second, it made claims of universality and psychological reality; and third, the features were not confined to the meanings of existing words, but were of an abstract nature.

The projection rules use trees to structure the amalgamation of word meanings into phrase meanings and then phrase meaning into sentence meaning. These rules have certain selectional restrictions designed to reflect some of the contextual effects of word meaning and operate limiting the output. An essential part of the theory is to establish a semantic meta language through the identification of the semantic components. That is to say, it is a highly prototypical decompositional theory. There are three reasons that justify identifying semantic components in componential analysis. The first one is that they allow an economic characterization of lexical relations since a small number of semantic components could be used to define a large number of words and allow comparison across languages. The second is that, according to some linguistic theories, only by recognizing them can we accurately describe a range of syntactic and morphological processes. Finally, there is an ambitious claim that semantic primitives form part of our psychological architecture as they provide us with a unique view of conceptual structure, as pointed out by Jackendoff (1983). Still another reason why componential analysis is important is that central to the conception of an organized lexicon is the understanding of the lexical, semantic, and conceptual unit.

Decomposition has been widely used as a descriptive device but has also been criticized by Lyons (1977, 1995), Allan (1986), and Cruse (1986, 2000), among others. At one extreme there is the position advocated by Fodor, who surprisingly claims that no decomposition is possible and that all words are learned and treated as wholes. At the other extreme, we find Wierzbicka's work (1980, 1985, 1992, 1996), who tried to work out a radical decomposition of all words into a number of primitives. In between we have Jackendoff's (1983, 1990, 1996) position. He argues for some kind of decomposition but observes that some conceptual information must be represented in other modalities.

Thus, one extreme version of componential analysis is found in the work of Wierzbicka (1996), who developed her theory in a very original way taking inspiration from Liebnitz. She holds that there is a set of universal semantic atoms in terms of which all conceivable meanings can be expressed. She proposes a list of primitives of a concrete nature that can be spelled out in any natural language. Using different meta languages, both Wierzbicka and Jackendoff select several of the same components, for instance (SOME)THING, PLACE, (BE)CAUSE, HAPPEN, BECOME and UNDER. However they differ in a series of fundamental ways. Wierbicka assumes and uses English syntax, whereas Jackendoff develops

explicit formal rules for mapping syntactic structure onto semantic structures which are consistent with generative grammar. Thus, it is implied that there is some sort of correspondence between universal grammar and Jackendoff's conceptual structures. Wierzbicka, on the other hand, analyzes grammatical meaning with the same methods and concepts that are used when analyzing lexical meaning. In addition, she has focused on cross-linguistic universals and on the possibility of composing concepts and lexemes out of a commonstore of universal primitives. Jackendoff, like many self addressed cognitivists, locates word meaning in conceptual structure. However, in contrast to most of them, he is strongly componentialist. In other words, he believes that intuitively perceived relationships must be accounted for in terms of shared semantic building blocks. The central principle of Jackendoff's conceptual semantics is that describing meaning involves describing mental representations. For him semantic structure is conceptual structure.

This theory is also known as the Mentalist Postulate. It is a strongly rationalist hypothesis, and this holds the idea that our conceptual structure is built up of units such as conceptualized physical objects, events, properties, times, quantities, and intentions. These conceptualized objects are in our minds and determine our perception of the world. Cruse (2000), following Jackendoff, defines conceptual structure by arguing that since the brain is a finite physical object, it cannot store an infinite number of forms mapped onto an infinite number of concepts; thus, just as the formal side of language solves the problem of infinity by providing a set of units with recursive rules of combination, similarly there must be primitives and formation rules.

LEARNING ACTIVITY 5.2.

Describe briefly the background of componential analysis of meaning.

5.3. How does the theory of meaning components work?

We have seen above that the kind of analysis that uses a list of identified meaning components—also called semantic primitives or semantic components—to define a word is often called componential analysis. If we study the lexical relations that seem to be implicit in sets of words like the following:

man-woman-child
dog-bitch-puppy
stallion-mare-foal

ram-ewe-lamb
bull-cow-calf
hog-sow-piglet

we see that there are a number of features whose presence or absence seem to define each word. As Saeed (2001:231) says, some semanticists have hypothesized that words are not the smallest semantic units but are built up of even smaller components of meaning which are combined differently (or lexicallized) to form different words. Thus, words like *woman*, *bachelor*, *spinster* and *wife* have been viewed as made up of elements such as [adult],[human], [married] etc., as in the following table:

woman [FEMALE] [ADULT] [HUMAN]
bachelor [MALE] [ADULT] [HUMAN] [UNMARRIED]
spinster [FEMALE] [ADULT] [HUMAN] [UNMARRIED]
wife [FEMALE] [ADULT] [HUMAN] [MARRIED

The elements in square brackets are called semantic components or semantic primitives and they cannot be broken down further. According to Saeed there are three important reasons for studying such components. Firstly, they may allow an economic characterization of lexical relations such as contradiction or entailment. Secondly, by recognizing these relations can we accurately describe a range of syntactic and morphological processes. And, finally, as some semanticists (Jackendoff) claim, such primitives form part of our psychological architecture and they provide us with a unique view of conceptual structure.

Lexical relations can also be viewed from the perspective of componential analysis, and typical semantic relations such as hyponymy or incompatibility can also be understood as a set of features. Such a set of features can be organized in this format so that automatic processing may be more feasible. Take hyponymy, for example,

woman [FEMALE] [ADULT] [HUMAN]
spinster [FEMALE] [ADULT] [HUMAN] [UNMARRIED]

and compare the sets of components. Hyponymy, then, can be defined in the following terms: A lexical item P (spinster) can be defined as a hyponym of Q (woman) if all the features of Q are contained in the feature specification of P. That is, in the same fashion, the words, *bachelor*, *spinster*, and *wife* are

incompatible among them because *bachelor*, and *spinster* differ in one feature (male / female) and *spinster*, and *wife* differ in another feature (married / unmarried). Componential analysis can also make use of binary feature specification and of redundancy rules in order to facilitate processing. The previous chart can be specified in the following way:

woman [+FEMALE] [+ADULT] [+HUMAN]
bachelor [+MALE] [+ADULT] [+HUMAN] [-MARRIED]
spinster [+FEMALE] [+ADULT] [+HUMAN] [-MARRIED]
wife [+FEMALE] [+ADULT] [+HUMAN] [+MARRIED]

This allows a characterization of antonyms by a difference of the value plus or minus a feature and so it is a more economical format and better adapted for computer processing. In the same fashion the statement of semantic components is also more economical if we include some redundancy rules which predict the automatic relationship between components. The following list shows an example of this rule:

HUMAN > ANIMATE
ADULT > ANIMATE
ANIMATE > CONCRETE
MARRIED > ADULT etc.

If we state these rules once for the whole dictionary, we can avoid repeating the component on the right of a rule in each of the entries containing the component on the left: so every time we enter [HUMAN], we don't have to enter [ANIMATE].

5.3.1. Components of Meaning

Palmer (1976:85) says that the total meaning of a word can be seen in terms of a number of distinct elements or components of meaning. Components have a distinguishing function and serve to distinguish the meaning of a lexeme from that of semantically related lexemes, or more accurately they serve to distinguish among the meanings of lexemes in the same semantic domain. To determine the meaning of any form contrast must be found, for there is no meaning apart from significant differences. Nida (1975: 31) states "If all the universe were blue, there would be no blueness, since there would be nothing to contrast with blue. The same is true for the meanings of words. They have meaning only in terms of

systematic contrasts with other words which share certain features with them but contrast with them in respect to other features".

Jackson in "*Words and their meaning*" (1996: 83) and Nida in "*Componential Analysis of Meaning"* (1975: 32) categorize the types of components into two main types, i.e. common component and diagnostic or distinctive component.

a. Common component: This is the central component which is shared by all the lexemes in the same semantic domain or lexical field.
b. Diagnostic or distinctive components: They serve to distinguish the meaning from others from the same domain.
A very simple example to explain these two types is provided by the words *man, woman, boy, girl,* and other related words in English (Leech, 1976: 96). These words all belong to the semantic field of 'human race' and the relations between them may be represented by the following matrix.

Table 5.1. Common and Diagnostic Components of the words *man, woman, boy,* and *girl:*

components	**man**	**woman**	**boy**	**girl**
[HUMAN]	+	+	+	+
[ADULT]	+	+	–	–
[Male]	+	–	+	–

In the semantic domain of *man, woman, boy,* and *girl*, [HUMAN] is the *common component*, and they are distinguished by [ADULT], [MALE], [FEMALE] as the *diagnostic component*s. The meanings of the individual items can then be expressed by combinations of these features:

Man +[human] +[adult] +[male]
Woman +[human] +[adult] -[male]
Boy +[human] -[adult] +[male]
Girl +[human] -[adult] -[male]

Before going further with the componential approach, it is important to consider possible differences in the roles of diagnostic components (Nida, 1975: 38). The differences can be best designated as (1) implicational, (2) core, and (3) inferential. Implicational component are those implied by a particular

meaning, though they do not form an essential part of the core meaning. On the contrary, implicational components remain associated with a meaning, even when other components are negativized by the context. The word *repent* has three diagnostic components: (1) previous wrong behavior, (2) contrition for what has been done, and (3) change of behavior, and the first component is implicational. Whether in a positive or negative context, e.g. *he repented of what he did* or *he didn't repent of what he did*, the implication is that the person in question did something wrong. The negation affects the core components which specify the central aspects of the event, but does not modify the implicational component.

The inferential components of meanings are those which may be inferred from the use of an expression, but which are not regarded as obligatory, core elements. In the expression *the policeman shot the thief*, 'the thief was killed' is the inference, and without further contextual condition assumed to be the case. However, it is possible to deny this inference, e.g. 'the policeman shot the thief but didn't kill him'. At the same time an inferential component may be explicitly stated, e.g. *the policeman shot the thief to death* or *the policeman shot and killed the thief.*

5.3.2. Componential Analysis of Meaning

Leech (1983:) defines the analysis of word meaning as " A process of breaking down the sense of a word into its minimal distinctive features , that is into components which contrast with other components." He (Leech, 1974:) defines the term , componential analysis as "The method of reducing a word's meaning to its ultimate contrastive elements". Within modern linguistics, the componential analysis of meaning was adapted from distinctive feature analysis in morphosyntax. Allan (1986) points out that "Anthropologists had for many years been comparing widely differing kinship systems in culturally distinct societies by interpreting them in terms of universal constituents that we might reasonably equate with semantic components. "

We can express the meaning of individual items by combinations of their features and they are called "componential definitions", such as *woman*: + HUMAN, + ADULT, –MALE. By using such formulate, we can show the synonymy of two items, for example: adult and grown up, can be given the same definitions + HUMAN, + ADULT although they differ in stylistic meaning. We can use such formulate also in polysemy, where one lexical item has more than one meaning or definition. *Man* is defined by the features + HUMAN , + ADULT , + MALE , but also has a wider definition consisting simply of the feature + HUMAN as in the sentence "*man has lived on this planet for over a million years*". (Leech , 1983:) In determining the semantic components of any one meaning, it is essential to compare the related

meanings of other words. In treating for example "whistle", we must know the different meanings of this word as in:

He will whistle to us He bought a whistle

And then analyze the two meanings in terms of other words; then one can analyze the ways in which different meanings of one term differ from another (Nida, 1983:)

We can see that components are used in analyzing semantic relationships but a very different approach is analyzing the total meaning of a word in terms of a number of distinct elements or components of meaning. The idea of components, does not introduce a new kind of relation but it offers a theoretical frame work for handling kinds of relationships. (Palmer, 1983:)

A comparatively new way to study lexical meaning is by analyzing lexemes into series of semantic features of components. For example, "man", can be analyzed as ADULT, HUMAN and MALE. This approach was originally devised by anthropologists as a means of comparing vocabulary from different cultures and has been developed by semanticists as a general framework for the analysis of meaning. Furthermore, the term componential analysis could be explained by considering the example stated below:

Man	woman	child
Bull	cow	calf
Rooster	hen	chicken
Drake	duck	duckling
Stallion	mare	foal
Ram	ewe	lamb

By examining the meaning of those words , we can set up the following proportional equation : man : woman : child , Bull : cow : calf From the semantic point of view , this equation displays the fact that the words man , woman and child on one hand and bull , cow and calf , on the other hand share something in common . In addition, we can see that man and bull have something in common which is not shared by the other two pairs , and woman and cow have also something in common which is not shared by either man and bull or woman and cow. The factor that is shared by these different groups of words, is called a semantic component, also called 'plereme' , 'sememe ' , 'semantic marker' , 'semantic category'.

Mathews (2007) defines 'plereme' as: "Hjelmslev's term for a unit of content ". He further defines sememe as : " Term used by various scholars for a basic unit of meaning ." He adds that " for Bloomfield a sememe was the meaning of a morpheme". Moreover, the equation mentioned above can be introduced by using numerical proportion: - a : b :: c :d (refer proportional series dealt in Unit 4). This means that where the first element is divided by the second, is equal to the third divided by the fourth. From this proportion , man : woman :: bull : cow , we can get four components of meaning and they are: [MALE] , [FEMALE], [ADULT – HUMAN], [ADULT – BOVINE]. Furthermore, we can extract the components [ADULT] and [non- adult] . We can factorize other components and eventually we can describe a word as “man” as the product of the components: [MALE] , [ADULT] and [HUMAN] . This componential approach to semantics has a long history in logic, philosophy and linguistics.

There are a number of important assumptions that the componential theories of semantics are based upon. The most important assumption suggests that the semantic components are language – independent or in other words, universal components. In many instances, it has been suggested that the vocabularies of all human languages can be analyzed partially or totally in terms of a limited set of semantic components and these components, themselves are independent of the particular semantic structure of any given language. According to this point of view, the semantic components might be identified as the same components in analyzing the vocabularies of all languages (Lyons, 1968).

Without regarding the linguistic model which any linguist prefers to use in describing the facts of language, the role of semantic components is almost universally regarded as being fundamental to any analysis of semantic structure. Semantic components are structurally essential if a linguist deals with semantic problems, in terms of domains, also if one prefers to deal with structure in terms of generative "trees" (Nida , 1975).

It is clear that the value of componential analysis in the description of particular language is not affected by the status of the semantic components in universal terms. It must also be realized that componential theories of semantics are not necessarily "conceptual” or "mentalistic”. This point should be emphasized because not only Katz and Chomsky , but also many other linguists have defended a componential approach to semantics within a philosophical and psychological framework which takes it for granted that the meaning of the lexical item , is the "concept" , associated with this item in the minds of the speakers of a particular language (Lyons , 1968). As an example , Katz presents the notion of semantic component or markers by considering for example the idea , each one thinks as part of the meaning of words "chair",

"stone", "man ", building" , etc…, but not part of the meaning of words as "truth", "togetherness", "felling" , etc…

The idea that we adopt to express what is common to the meaning of words in the first set and that we use to conceptually distinguish them from the words in the second set. The semantic marker (physical object) is introduced to indicate that notion . It has been suggested that the semantic theory should avoid commitment with respect to the philosophical and psychological status of "concepts", "ideas" and "mind". Thus the first set represents things which are related to the acceptability of or un acceptability of sentences or to the relation which holds between the sentences , which can be described by assigning to the words of the first set , a distinctive semantic component which is called " physical object " (Lyons , 1968).

In analyzing kin terms , a comparison is made for instance , between the set of English terms and Spanish terms and we note that in Spanish there is a regular marking for the sex of kin and there is no such marking in English (Allan, 1986).

Male		Female	
tio	Uncle	tia	aunt
hijo	Son	hija	daughter
abuelo	Grandfather	abuela	grandmother
hermano	Brother	hermana	sister

From this example , we have also obtain a single atom of meaning , male as opposed to female with which we can define the difference between *uncle*, *son* , *grand father* and *brother* as a set opposed to *aunt*, *daughter*, *grand mother* and *sister* as a set. Such descriptions of meaning are done by feature analysis. The starting point is the notion that components can be taken out as a group of defining features providing critical information about the qualities by which such terms are recognized within its field.

The early writers who wrote on componential analysis in morphosyntax and kin ship systems had changed contemporary linguistic opinion on semantic analysis by showing that it can be carried out by using structural analysis, such as that method by which we can compare and contrast *father, uncle* and *aunt*. These kinship terms have in common that they are [ASENDING GENERATION]. *Father* and *uncle* both have in common, that they are [MALE], whereas aunt is [FEMALE], *aunt* and *uncle* are [COLLATERAL], whereas father is [LINEAL]. So by the semantic components, we can show the

meaning of the relationship between father, uncle and aunt (Allan, 1986 :). Analysis of this kind which is called componential analysis allows us to provide definition for a larger set of words in terms of few components. Such labels as [FEMALE] , [MALE], [ADULT] etc , are not available as in the following two sets of words: *come* - *go*; *bring* - *take*. We can see that *come* is to *go* as *bring* to *take*, but it is difficult to name these components (Palmer, 1983 :)

Palmer also provides this example to state that "It is unlikely, that components are universal features of language." He adds that we may think perhaps that all the societies differentiate between [MALE] and [FEMALE] , and that thus [MALE] and [FEMALE] are universal components of language , but the come , go , bring , take examples show that , these components are not related to simple physical features such as sex, and it becomes less reasonable to assume that they are universal (Palmer, 1983:)

If each individual word is seen as having unique dictionary definitions and yet is to be contained within a uniquely restricted lexical field, such definitions will have to be dependent on a sort of componential analysis, which is breaking down the meaning of words by reference to atoms of meaning. These units were termed as semantic markers by Katz and Fodor, and appear as selectional features in Chomsky's discussion. These markers or semantic features denote a characteristic, shared by an entire group of words and set it off from other set of words which presumably are described by similar defining features. In componential analysis, contrasts of features are usually made in terms of '+' (plus) or '–' (minus) and often drawn in a matrix. In many instances, the componential analysis becomes interesting, as the lexemes become more complex. The example below is a possible matrix for some human motion verbs:

Table 5.2. A possible matrix for some human motion verbs

	NATURAL	HURRIED	FORWORD	ONE FOOT ALWAYS ON THE GRPOUND
Walk	+	–	+	+
March	–	+	+	+
Run	–	+	+	+
Limp	–	–	+	+

Sometimes, it is easy to use a system of this kind, in order to see what lexical gaps there are in a language. This matrix suggests that there is no single English lexeme to express the notion of "human using legs to move backwards" (Crystal, 1997 :).

Allan (1986:), summarizes the assumptions implicit in componential analysis as: " a – Componential analysis seeks to analyze the sense of an expression E into a set of semantic component corresponds to a category of which the category labeled by E is a subset. b – Every expression E in a language L should be analyzable into one or more semantic components. c – There is no one to one correlation between morphs and semantic components. d – Expressions that share semantic components reflect the characteristics of prototypical denotation. f – There is a hierarchy of categories; e.g. FELINE, which is a semantic component of cat , entails the semantic component ANIMAL, which is also therefore a component of cat."

Componential analysis (CA) is based on the presumption that the meaning of a word is composed of semantic components. So the essential features that form the meaning are elementary units on semantic level. By componential analysis, it is possible to state the smallest indivisible units of lexis or minimal components (Aitchison, 2003: 92). CA is particularly applicable to distinguishing the meanings of lexemes that are semantically related or in the same semantic domain. It is often seen as a process of breaking down the sense of a word into its minimal distinctive features; that is, into components which contrast with other components. It refers to the description of the meaning of words through structured sets of semantic features, which are given as “present”, “absent” or “indifferent with reference to feature”. To describe the presence and absence of a feature binary rules are used. The symbol ‘+’ means the feature is present, while ‘-‘ means the feature is absent (Saeed, 2009: 260). Structural semantics and CA were patterned on the phonological methods of the Prague School, which described sounds by determining the absence and presence of features (Jackson, 1996: 80). The method thus departs from the principle of compositionality (Saeed, 2009: 265). The lexical decomposition (or componential) approach to lexical semantics became one of the most influential in the 1960-1970s. In this theory, word meanings were broken down into semantic primitives or semantic features and their specifications.

CA is a method typical of structural semantics which analyzes the structure of a words meaning. Thus, it reveals the culturally important features by which speakers of the language distinguish different words in the domain. This is a highly valuable approach to learning another language and understanding a specific semantic domain of Ethnography. Furthermore, Leech (1976: 98) states “as a distinctive technique, componential analysis first evolved in anthropological linguistics as a means of studying relations between kinship terms, but it has since proved its usefulness in many spheres of meaning”.

The semantic domain where componential analysis was first used with some success was kinship terminology. Kinship terms are conventionally described in relation to a given person, technically termed

by the Latin equivalent of the pronoun I:*ego*. There are some components needed to analyze the terms, they are gender and generation (in respect of *ego*). For examples, *brother* and *sister* are the same generation as *ego*. While *father* and *mother* are one generation above (ascending generation) and *son* and *daughter* are one generation below (descending generation). We therefore need two semantic components to distinguish the generation: [ASCENDING] and [DESCENDING]. Gender and generation are not sufficient in distinguishing the meanings, we then need another component to contrast 'direct' or 'lineal' descent and 'collateral' descent. A semantic component of 'LINEAL' is then proposed. Below is the matrix which represents unique analysis of each term in the kinship system.

Table 5.3. The matrix of kinship terms (Jackson, 1996: 82)

Kinship terms	**[MALE]**	**[ASCEND]**	**[DESCEND]**	**[LINEAL]**
Father	+	+	-	+
Mother	-	+	-	+
Uncle	+	+	-	-
Aunt	-	+	-	-
Brother	+	-	-	+
Sister	-	-	-	+
Son	+	-	+	+
daughter	-	-	+	+
Nephew	+	-	+	-
Niece	-	-	+	-
Causin	+/-	-	-	-

5.3.3. Analysing and Distinguishing Meanings

The fact that semantic relations reveal aspects of meaning is one of the motivations for a componential approach to semantic analysis. Consider a series of hyponyms like piece of furniture – *chair* – *armchair*. It is easy to see that each successive level in such a hyponymy simply adds a further semantic specification (or component) to the previous one. Thus, the level *chair* adds a specification which we could describe as 'for one person to sit on' to piece of furniture, and *armchair* adds 'with arms' to *chair*. Similarly, we could describe the difference between chair and sofa through a contrast between the feature 'for one person to sit on' (*chair*) and 'for more than one person to sit on' (*sofa*). Continuing in this way, we could envisage an entire description of the semantic field of words for furniture items based on the

presence or absence of a finite number of features, conceived as the ‘conceptual units out of which the meanings of linguistic utterances are built’ (Goodenough 1956: 196). This is illustrated in Table 5.4.

Table 5.4. Componential analysis of English furniture terms.

	with back	with legs	for a single person	for sitting	with arms	rigid
chair	+	+	+	+	–	+
armchair	+	+	+	+	+	+
stool	–	+	+	+	–	+
sofa	+	+	–	+	+	+
beanbag	–	–	+	+	–	–

The information contained in componential analyses like this is essentially similar to the information contained in a definition; in principle, anything that can form part of a definition can also be rephrased in terms of semantic components. Its embodiment in binary features (i.e. features with only two possible values, + or −) represents a translation into semantics of the principles of structuralist phonological analysis, which used binary phonological features like [± VOICED], [± LABIAL] [± NASAL], etc. to differentiate the phonemes of a language.

The use of a restricted number of binary features was one of the most successful innovations of the structuralist programme of linguistic analysis developed in the wake of Saussure by early Prague Schools phonologists like Trubetzkoy and Jakobson, and continued in America in the generative tradition by Chomsky and Halle. The componential analysis of meaning like the one sketched in Table 5.1 is precisely analogous to the feature specifications of phonemes advanced in the structuralist tradition. Thus, just as sofa can be described through the use of binary semantic components like [+ WITH BACK], [+ WITH LEGS], [− FOR A SINGLE PERSON], [+ FOR SITTING], [+ WITH ARMS], [+ RIGID], so the phoneme /d/ of English would be described (in the system of Chomsky and Halle 1968) as a constellation of the following distinctive features:

/d/ [+ consonantal, − nasal, − sonorant, + anterior, + coronal, + voiced . . .]

These distinctive features serve to differentiate /d/ from the other phonemes of the English consonant inventory; /t/, for instance, shares all the feature specifi cations of /d/, except that it is [− voiced]:

/t/ [+ consonantal, − nasal, − sonorant, + anterior, + coronal, − voiced . . .]

The use of distinctive binary features as an instrument of phonological analysis proved extremely fruitful and permitted a degree of formalization that many linguists took as a model of successful linguistic theorizing, and it was soon extended to the analysis of morphology. From this, application of features to semantics was a natural development. Whereas a standard dictionary represents the contrast between *chair* and *sofa* through differing definitions, as in, the componential analysis represents the same difference in meaning simply through the presence or absence of a single feature, [for a single person], an analysis which struck many linguists as superior in terms of its concision.

> chair ‘a separate seat for one person, of various forms, usually having a back and four legs’ sofa ‘a long upholstered seat with a back and arms for two or more people’ (Concise Oxford 1995)

Some componential analyses went beyond strict feature binarity to include a third value, 0, which indicated that a word was unspecified for a particular feature.

What is important for our purpose is not whether the analysis is accurate, but the conceptual framework to which it belongs. Componential analysis was not simply an innovation with respect to preceding modes of semantic analysis. It also crystallized a number of the implicit characteristics of ordinary lexicographical description, particularly the idea that the definitional metalanguage used to describe meanings should ideally be constituted by a fixed number of elementary terms which, in order to avoid circularity, would not themselves be open to further analysis. It is only a small step from such a conception of definition to the formalizations of componential analyses with their fixed repertoire of features, taken to represent the elementary building blocks of meaning.

Despite the popularity it enjoyed for a time, especially in structuralist circles, componential analysis is confronted with a number of serious problems. One important problem is the rigidity of the binary feature system, according to which the only possible value of a specified semantic feature is + or − (or unspecified). This aspect of the analysis came to be seen as increasingly unsatisfactory from the 1970s onward, largely in light of psychological evidence about human categorization which we will discuss later. This was not the only problem, however. Another serious problem was the fact that it seemed simply not to apply to many areas of the vocabulary.

Componential analysis is particularly suited to restricted semantic fields from which intuitively obvious semantic distinctions can easily be abstracted. The most obvious types of lexeme to which it can be applied are nouns with obvious properties available for conversion into features ('with legs', 'to sit on', 'for one person', etc.). Elsewhere, however, the utility of features is much less clear. Thus, whereas componential analyses were advanced of words for furniture, of dimension words like tall, short, long, thick and, especially, of kinship terms (an area where the binarity of features such as [± FEMALE] [± SAME GENERATION] is particularly justifiable; (cf. Goodenough 1956, Lounsbury 1956), not many other areas of the vocabulary proved open to convincing analysis in this method. As a species of definitional analysis, componential analysis inherited the failings of traditional definitions, and words which are hard to produce definitions for are also hard to analyse componentially.

The domain of colour terminology is exemplary in this respect, since it does not seem possible to distinguish any inherent components within the meanings of the different colour adjectives, any more than it is to propose definitions of them. What features, for example, could we plausibly advance in order to distinguish yellow from red? We could always advance the features [± RED] and [± YELLOW], but this sort of move was not considered legitimate: the features were supposed to analyse the meanings concerned, not simply treat them as unitary elements. Certainly these words do not have any obviously available conceptual components of the sort we could discern in the tables above.

Furthermore, many relational ideas which can easily be expressed in the propositional format of ordinary language definitions are hard to couch in sets of plausible-sounding binary features. The meanings of the verbs *buy, swap, sell, stea*l, for example, do not seem to easily submit to description in terms of any distinctive features – or not, at least, to any distinctive features that would be significantly different from a definition. One could always, of course, develop a description through features like [± EXCHANGE] [± PRICE] [± TRANSFER OF POSSESSION] and similar, but the resulting feature decompositions, sketched in Table 5.5, do not seem to gain any explanatory advantage over verbal definitions – in fact, they seem rather less effective in their inability to incorporate the relational ideas which sentential definitions can easily accommodate. For example, the feature [subject receives] seems a clumsy way of capturing the difference between buy and sell, a distinction which emerges quite naturally from the definitions 'exchange for goods or services', and 'exchange goods or services for money'.

Table 5.5. Componential analysis of English transfer verbs.

	transfer of	voluntary	exchange	price	subject receives

	possession	transfer			
buy	+	+	+	+	+
sell	+	+	+	+	–
steal	+	–	–	–	+
give	+	+	–	–	–
swap	+	+	+	–	+

Note that these features are meant to apply to transitive, active forms of the verbs: otherwise, the feature [subject receives] will not be an accurate description of the difference between the verbs.

We doubt whether we can you formulate a better set of features to describe the meaning of these verbs? What, if any, extra features need to be added in order to account for the verbs transfer, *take, barter, lend* and *hire*? Another problem with componential analysis as a semantic method can be illustrated by a comparison with phonology, the domain in which the technique was first developed. In phonology, features like [± VOICE], [± CORONAL], etc. generally have clear physical definitions: a segment is [+ VOICE] if the vocal folds are vibrating during its production, and [− VOICE] otherwise. Whether a segment should be classified as [+ VOICE] or as [− VOICE] can therefore, at least in principle, be reasonably unambiguously established. In contrast, the definition of semantic features is much less clear.

Consider as an example the case of [+ WITH LEGS] in the analysis of the noun chair. Many modern types of chair are supported by continuous metal runners which fulfil the same function as traditional legs. Does this type of chair count as [+ WITH LEGS] or not? We could, of course, simply stipulate, as a matter of definition, that the feature [+ WITH LEGS] applies to this type of chair as well, but if this type of stipulation is necessary too often there is a risk that the features used become arbitrary. Since there are no clear physical or psychological correlates of the semantic features, as there are for the phonological ones, which we could determine experimentally, it is often not obvious how a principled decision is to be reached: we cannot, after all, open up our heads and look inside in order to discover the ‘real’ nature of the concept involved, in the same way that we can determine observationally whether the vocal folds are usually in operation in utterances of a given segment.

In spite of these problems, the use of distinctive features in componential analysis had some subtle consequences for many linguists’ conception of semantics, by making meaning seem something much more concrete and uniform than it had appeared in traditional dictionary definitions. If the definition of chair as ‘a separate seat for one person, of various forms, usually having a back and four legs’ provides an

intuitively clear pointer to the word's denotation, it is still thoroughly informal, and open to a large number of different, and equally effective, phrasings. This did not seem to be the case with a componential analysis in terms of features like [+ WITH BACK], [+ WITH LEGS], [+ FOR A SINGLE PERSON], [+ FOR SITTING], [– WITH ARMS], [+ RIGID], which brought two important innovations.

The first was to suggest that semantic features, like phonological ones, have a higher degree of abstraction and technicality than informal dictionary definitions. Phonological features like [± NASAL] or [± CORONAL] refer to postulated abstract properties of segments which do not have any independent existence: the feature [± NASAL], for instance, never exists on its own, but is only found together with other features such as [+ CONSONANT], and is abstracted as the common element from a whole range of sounds like [m], [n] and [ŋ]. Similarly, the adoption of componential analysis encouraged a view of semantic components as abstract, underlying elements of meaning. Given widespread conceptualist assumptions about meanings, it was easy to identify these abstract elements with the conceptual constituents of language (see Lounsbury 1956:163).

Second, in spite of the fairly small number of words for which successful componential analyses were proposed, componential analysis encouraged the assumption that the same distinctive semantic features would recur again and again in the analysis of a vocabulary; assuming, for example, a feature [± EDIBLE] that distinguishes the nouns beef and cow, one could then use the same feature to distinguish plant and vegetable. As a result, the underlying semantic content of language was made to seem highly uniform, with word meanings all cut from the same cloth, and it became possible to identify the underlying conceptual content of a language's vocabulary with the finite list of distinctive semantic features required for its componential analysis, in the same way that the set of phonological distinctive features constituted the raw material out of which individual languages constructed their phonemic systems. And just as, in phonology, this repertoire of distinctive features was assumed to be universal, it was easy to assume that all human languages shared the same set of underlying semantic features – even though this was strenuously denied by certain proponents of the method.

LEARNING ACTIVITY 5.3.

(1) Analyze the *words man, woman, girl* and *boy* using componential theory of meaning.
(2) What are distinguishing componential features of the following words of furniture: *chair, armchair, stool, sofa* and *beanbag*?
(3) How will you distinguish the following verbs of transfer: buy, *sell, steal, give* and *swap.*

(4) List a few important kinship terms in your mother tongue. Explain the way to analyze them using componential analysis of meaning.

5.4. Procedural Steps in the Componential Analysis of Meaning

Componential analysis (CA) can only be done within the same semantic domain. There are three basic steps in the procedure for determining the diagnostic features (Nida, 1975: 48), they are:

a. determining the common features and line up all the apparently relevant differences in form and possibly related functions;
b. studying the relations of the features to one another, in order to determine the redundancies and dependencies; and
c. formulating a set of diagnostic features and testing such a set for adequacy.

Furthermore, Nida (1975: 54-61) has developed these three basic steps into six procedural steps which are important for analyzing the components of a related set of meanings.

a. Conducting a tentative selection of meanings which appear to be closely related, in the sense that they constitute a relatively well-defined semantic domain by virtue of sharing a number of common components: In this case, the meanings of *father, mother, son, daughter, brother, sister, uncle, aunt, nephew, niece* dan *cousin* all share the components of being applicable to human beings and designated persons who are related either by blood or by marriage.
b. Listing all the specific kinds of referents for each of the meanings belonging to the domain in question: In some special situations one may even be able to list all the referents. For *father* and *mother,* as related to any one ego, there would presumably be only one referent. Expressions such as *father-in-law, mother-in-law, stepfather,* and *stepmother* are all regarded as separate semantic units and should be treated only as parts of extended domain, since they are clearly secondary in formal as well as semantic structure.
c. Determining those components which may be true of the meanings of one or more terms, but not of all the terms in question: Obviously some of the meanings, as reflected in the differences between referents, involve the component of female sex, e.g *mother, aunt, daughter, sister, niece,* and *cousin,* while others involve the component of male sex, e.g. *father, uncle, son, brother, nephew,* and *cousin*. The term *cousin* is nondistinctive with respect to sex. One must proceed feature by feature to determine those components which do make distinctions, and ultimately the

features of sex, generation, and lineality, and consanguinity vs. affinial relations prove to be the distinctive features.

d. Determining the diagnostic components applicable to each meaning, so that the meaning of *father* may be indicted as possessing the components: male sex, one ascending generation, and direct descent; *mother* as female sex, one ascending generation, and direct descent; *brother* as male sex, same generation as ego, and first degree of laterality; etc.

e. Cross-checking with the data obtained by the first procedure: On the basis of the diagnostic features, one should be able to apply the correct terms to the referents known to possess such features.

f. Describing the diagnostic features systematically: It may be done simply by listing the diagnostic features for each meaning (or term) or the arrangement of such data in the form of a tree diagram or matrix.

Table 5.6. The diagnostic features of kinship terms

+1 GENERATION	*father*	*Mother*	*uncle*	*Aunt*	*cousin*
0 GENERATION	*Ego*		*Brother*	*Sister*	
–1 GENERATION	*son*	*Daughter*	*Nephew*	*niece*	

LEARING ACTIVITY 5.4.

(1) What are the three basic steps in the procedure for determining the diagnostic feature.

(2) Describe the six procedural steps which are important for analyzing the components of a related set of meanings.

5.5. Linguistic Basis for Componential Analysis

The actual linguistic procedures employed in CA consists of four types, they are naming, paraphrasing, defining, and classifying. If elicitation of usage is carefully conducted and if the results of such a procedure are carefully checked against spontaneous utterances, there is every reason to believe that the results of using the four basic processes of naming, paraphrasing, defining, and classifying can be essentially accurate (Nida, 1975: 64-66).

a. naming

The process of naming is in certain respects similar to reference, though the perspective is somewhat different. Reference is usually described as the relation established between linear unit and a referent, while naming is the specific act of designating a referent.

b. paraphrasing

Paraphrasing is also an important linguistic function and one can spell out the distinctive features of any semantic unit by employing certain types of paraphrases. *Uncle* can be paraphrased into *my father's brother* or *my mother's brother.*

c. defining

The process of defining would seem to be simply another form of paraphrase, but defining is a highly specialized form of paraphrase and is rarely used in actual language situations. It consists essentially in combining all the various specific paraphrases into a single statement based on the diagnostic components of the particular meaning in question. *Uncle* may be defined as *the brother of one's father or mother or the husband of one's aunt.*

d. classifying

It involves a triple procedure: (1) lumping together those units which have certain features in common, (2) separating out those units which are distinct from one another, and (3) determining the basis for such groupings. Classification is never merely a process of putting referents into conceptual files for the basic kinship terms in English, it is essential to establish the features of sex, generation, degree of lineality, and consanguinity-affinal distinction.

LEARING ACTIVITY 5.5.

Differentiate between the following: naming, paraphrasing, defining, and classifying.

5.6. Contributions to the Study of Meaning.

Componential analysis has a useful part to play in contributing to the description of meanings of lexemes (Jackson, 2009: 91-92). Here are some of the contributions.

a. Understanding synonymy: A pair of true synonyms will share the same set of semantic components. For example, *adult* and *grown-up* have the same components [+HUMAN] [+ADULT].

b. Establishing degrees of synonymy: We may talk of looser synonymy where a pair of lexemes have some but not all semantic components in common. For example, *barn* and *shed* would be looser synonyms. They share components [BUILDING], [STORAGE], but *barn* has additional component of [FARM] and perhaps that of [FOR CEREALS], while *shed* has perhaps the additional component [HOUSE].

c. Understanding antonymy.

A pair of antonyms usually share all their components except one, e.g *man* and *woman* share the components [+CONCRETE], [+ANIMATE], [+HUMAN], but they are contrasted by the component [MALE].

d. Understanding the sense relation of hyponymy: Hyponymy refers to the relation of inclusion of meaning, e.g. the fact that the meaning of *rat* is included in the meaning of *rodent.*

e. Helping translator to produce accurate translation: CA Determines the essential features of meaning of lexical units, which is very useful in doing translation (Nida, 1975:7).

LEARING ACTIVITY 5.6.

Describe briefly the componential analysis has played a useful part in contributing to the description of meanings of lexemes.

5.7. Basic Difficulties Encountered in the Analysis of Semantic Components

A number of fundamental difficulties are involved in determining the diagnostic components of the meanings of semantic unit (Nida, 1975:61-64).

a. The lack of an adequate metalanguage with which to describe some of the diversities. It is difficult enough to speak of distinctions in color, so that a contiguous series such as *violet, blue, purple, green, yellow, orange,* and *red* can be properly described in terms of diagnostic components. Another obvious example involves the semantic domain of odors: *stink, smell,*

stench, and *malodor,* or the semantic domain of noises seperti *scream, screech, squeak,* and *squeal.*

b. Meanings which constitute a contiguous set: The meaning of *even* in contexts such as *even john kissed Marry, John even kissed Marry,* and *John kissed even Marry* is paralleled to some extent by *only*, e.g.*only John kissed Marry, John only kissed marry,* and *John kissed only Marry*. The related meanings of *even, only,* and *just* are contiguous, therefore one must look for other sets of contrast to provide the basis for componential analysis.

c. Some terms which primarily differ only in the degree of intensity: There may be no absolute feature which marks the difference but by only a relative contrast. *Toss* and *hurl* may be regarded as types of throwing, but the major difference is one of intensity, and accordingly one must reckon with a continuum on which there is no fixed boundary between the two. The speed at which a professional baseball player may toss a ball may be much faster than the speed at which some amateur ball players can hurl.

d. The meanings of certain terms exist only in one's passive vocabulary: One may, for example, have a general idea of the meanings of *saunter, stroll,* and *meander,* as referring to ways of walking, but the fact that these terms are not in one's active vocabulary tends to make it difficult to determine how and to what extent such meanings differ.

e. The diversity of viewpoints, especially in describing spatial relations: For a *house* one can speak of behind and in front of, since a *house* is regarded as having a back and front. But when one speaks of behind a *tree* and in front of a *tree*, the spatial relation must be relative to a view point character or existing situation. Time involves similar difficulties.

f. The meaning of many abstract terms: It involves a number of complications because of their potential syntagmatic relations to so many events and entities. A word such as *lousy* may occur with a vast number of different semantic heads, e.g. *lousy meal, lousy person, lousy time, lousy deal, lousy weather, lousy grades, lousy book, lousy performance*, etc. None of which have anything to do with a louse.

g. A word can have different meanings in different fields: The word *competence* is used in the fields of linguistics, education dan psychology, and they define and use it in different ways and contexts.

h. Deixis terms: The different meanings and use of "*there* and *here*" and "*this* and *that*" depend primarily on space and time.

i. Distinctions may be based on relations rather than on physical features: Certain aspects of complications have already been noted in the discussions of kinship terms, but meanings reflected in suh terms as *friend, partner, colleague,* and *associate* are even more difficult to analyze.

j. The componential analysis becomes much more complex when the relation describe logical arrangements, as with *if, though, because, in order to*, etc.

LEARNING ACTIVITY 5.7

Briefly explain the fundamental difficulties involved in determining the diagnostic components of the meanings of semantic unit.

5.8. Applicability and Universality

Is there then a set of semantic components which is universal and from which the meanings of lexemes in all languages are composed? If there is, we do not have yet the knowledge or the metalanguage to specify what such a set might be. Some words are also culture-bound, which means the meaning distinctions that are relevant to one culture may not fit another culture at all. For example, all cultures have kinship systems, but they are often organized in a quite different way (Jackson, 1991:91).

Componential analysis is also limited in its range of applicability as it does not apply easily to all areas of the vocabulary. Semantic components, when they can be identified, have a discriminatory function and they add to our understanding of the meaning of a lexeme by providing points of contrast with semantically related lexemes. The meaning of a lexeme must also involve a number of perspectives, e.g. denotation, sense relations, and collocation.

Another problem of its application which shows its limitation is the fact that componential analysis (among other types of meaning) only focuses on referential meaning. In other words, it is only concerned with the relation between the lexical unit and the referent, and the meanings of lexemes which refer to objects. It is important to consider that not all words have referents (Nida, 1975:25).

Some linguists also believe that componential analysis account naturally for overlaps, since one can point to components which are apparently shared by overlapping words. *Cow, princess and tigrees* overlap because the share the component [FEMALE]. It is also somewhat inaccurate to speak of the meaning of words as being composed out of a heap of separate components. At best, these socalled components form only a small part of the overall meaning of the word in question, and the whole approach wrongly suggests that if we look a little more carefully, we may be able to sort out all of them. The words ‘components’ and ‘componential analysis’ have therefore faded out of fashion. Nowadays, people tend to talk of words having semantic properties, which are somewhat more satisfactory, since it does not imply that these properties are building blocks which need to be assembled.

It works best with taxonomies (systems of classification, e.g. kinship) or sets of concrete objects. It is of more doubtful value in describing the meanings of more abstract lexemes, not least because we lack an adequate metalanguage. Consider the set of lexemes: *annoy, irritate, vex, displease,* and *provoke*. They all refer to the ways of causing someone to be angry or to feel angry, any member of the set is frequently defined in terms of one or more of the members. We may conclude therefore that there is no universal set of semantic components from which the meanings of lexemes are composed.

LEARING ACTIVITY 5.8.

(1) Describe the applicability of componential analysis of meaning.
(2) Describe the universality of componential analysis of meaning.

5.9. Apparent Advantages of The Componential Approach

The most important advantage of the componential approach to semantics is that in terms of the same set of components , we can answer two different questions : the first is about the semantic acceptability or un acceptability of syntagmatic combinations of words or phrases, the second question is "what is the meaning " of a given or particular combination of lexical items ?

It has been suggested that the significance of any grammatically well-formed sentence is traditionally accounted for in terms of specific general principles of compatibility between the meanings of their constituent lexical items. If we take the word (pregnant) and assume that it contains a component which restricts it to the modification of nouns which contains the component (female), according to this rule (a pregnant woman) or (a pregnant mare) would be significant but the phrase (the pregnant man) or (a pregnant stallion), would be meaningless or uninterpretable (Lyons , 1977:327).

Componential analysis made considerable contribution to the development of semantics. The most significant thing is that it brought together both the formalization of syntax and the formulization of semantics closer together and linguists are seriously concerned with the relations between syntax and semantics (Lyons , 1977: 318) . Semantic components represent the conceptual constituents of senses in the same phrase markers represent the syntactic constituents of sentences. They represent not only the atomic constituents of meaning (the simplest concept), but also the complex ones (Katz, 1972) .

Attempts have also been made to explain the relatedness of meaning in terms of componential analysis of the senses of lexemes. This approach is also used in the analysis of meaning for the vocabulary as a whole and shows how it can be used not only in relatively clear-cut examples but also in complex ones. (Lyons , 1977:).

Ethno linguistic investigations use this device of componential analysis successfully although limit its use to relatively restricted areas of cultural experience like kinship relations or colour categorization. Here we have to mention that componential analysis does not handle all semantic relations with the same affectivity for on one hand, it is difficult to reduce the relational opposites to components as in parent / child. We could treat this as having the same components but in different direction, that they are relational and not atomic components. On the other hand, the componential analysis cannot remove the hierarchical characteristic of hyponymy. (Palmer, 1976 :)

A further way to the study of meaning is done by the process of the componential analysis, which is breaking down the meaning of a word into its components which can be contrasted with other components. This method is first used by anthropologists who compared differing kinship systems in different societies. This device also has a long history in logic, philosophy and linguistics. The componential analysis has many advantages and that is why it becomes essential for the linguist to use such approach in dealing with different problems of semantics. The idea of componential analysis does

not introduce a new type of relation , but presents a theoretical frame work for dealing with such relations .

Its contribution in morphosyntax and kinship systems has changed contemporary linguistic opinion on semantic analysis by showing that it can be carried out easily by using structural analysis. Such analysis provide us with an economical way to treat a set of words in terms of few components. On one hand , this componential analysis is also beneficial in defining what lexical gaps are there in a given language , and on the other hand is good in handling not only the atomic constituents of meaning but the complex ones also. Its clear effect in bringing closer both the framework of syntax with the framework of semantics, is considered to be a big step towards the development of semantics in the last few decades. In the present time, it is widely suggested that semantic components are language -independent or universal, shared by vocabularies of all the languages , thus it gained a great deal of importance .

LEARING ACTIVITY 5.9.

(1) Describe the contribution of componential analysis to syntax.
(2) Describe the contribution for componential analysis in morphosyntax and kinship systems.

5.10. Strengths and weaknesses of componential analysis

Strength

- Componential analysis is effective when it comes to representing similarities and differences among words with related meanings.
- It allows us to group entities into natural classes (similar to phonology); e.g. man and woman care in a class defined by the features [+HUMAN, +ADULT]
- We can now define certain sense relations more precisely by making use of semantic features:

  synonymy: two words have exactly the same features

  oppositeness: two words W1 and W2 share the same features except for one feature of W1 being [+] and the same feature of W2 being [-].

  Hyponymy: W1 is a hyponym of W2 if the meaning of W1 contains all the features of W2 but not vice versa.

Weaknesses

- Circularity: it is argued that semantic features are abstractions that underlie the actual words of a language, but in fact the features ARE words of the language.
- No one has yet determined a complete list of features which are needed to analyse all the words of a language, let alone the words of all languages.
- In any particular use of a word, only some of the postulated features may be relevant.
- Semantic features are binary, but binary features are not always the best way of analyzing a semantic field. • There is no evidence that semantic features have any psychological reality
- There are fuzzy concepts (How much does one have to be worth to be called rich? Consider also old, tall, grey-haired, genius, clean)
- Membership in a category can be graded: A robin is a "better" bird than a penguin. In the classical model of componential analysis all members are equal.

LEARING ACTIVITY 5.10.

(1) What the strength of componential analysis.
(2) Discuss the weakness of componential analysis.

SUMMARY

Components serve to distinguish among the meanings of semantically related lexemes in the same semantic domain. Analysis in terms of components, when the total meaning of a lexeme is seen in terms of a number of distinct elements or components of meanings, is not sufficient but can help to define the meaning of a lexeme formed by a number of semantic signs. Through six careful procedural steps of analysis which are simplified into four basic processes of naming, paraphrasing, defining, and classifying, componential analysis has been a useful approach to determine the meaning of a lexeme.

Since the meaning of a lexeme involves a number of perspectives, knowledge on the dimensions of meanings and metalanguage is very essential to make this analysis work. Despite its usefulness in the analysis of meaning, we may encounter difficulties and limitations in applying the theory. It can not be applied easily to all areas of the vocabulary, due to in part metalanguage and cultural problems. In terms of its universality, it can be concluded that there is no universal set of semantic components from which the meanings of lexemes are composed.

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UNIT 6

DYNAMICS OF WORD MEANING AND LEXICON

CONTENT

6.1 Dynamics of word meaning
6.1.1. Contextual variability of word meaning
6.1.2. Polysemy
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6.1.4.1. Mechanisms of semantic change
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6.2. Lexicon
6.2.1. Dictionary and thesaurus
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OVERVIEW

World is full of things and concepts. Language has only limited number of words to express those things and concepts. Language resort to many mechanisms to overcome this difficulty. It does fundamentally two things to cope up this difficulty; one is by coining new words and another is expanding the range of the meaning of a word. The second mechanism leads to polysemy. Most of words are polysemous. It is difficult to find out a monosemous word. Polysemy can be attributed to contextual variability of word meaning or extension of meaning due to context. A lexicon focuses on the poysemy which culminates into contextual variability of meaning. At one dimension, the information about words constitutes the lexicon. Interestingly, when the lexicon has been externalised and organised, we have the dictionary. Indeed, the richer and the more comprehensive the dictionary of a language, the more it has the capacity to express meaning. Recently worNets have built a full-fledged on-line lexical resource. The theory of generative lexicon tries to find ways to cope up with the enormous proliferation of meaning due to meaning extension and meaning change which culminates into polysemy.

LEARNING OBJECTIVES

After completion of this unit, you should be able to know:

(1) the contextual variability of word meaning
(2) polysemy
(3) extensions of meaning
(4) semantic change
(5) about the conventional dictionaries
(6) semantic lexicon such as wordNet
(7) theory of generative lexicon

6.1. Dynamics of meaning

Meaning is not static. It is dynamic and propagates into difference senses due its use in different contexts. A fundamental problem lexicologists are concerned with is the fact that the number of words at our disposition is limited but that human imagination is virtually unlimited and that the number of things, beings, processes and ideas that can be referred to is endless. There are mainly two strategies to cope with this disproportion: first, we match the concrete referent with a lexicalized meaning of a word and actualize this meaning in the concrete context; second, if the first strategy cannot be applied or risks to fail because there is no lexicalized meaning to cover the actual referent, we must create a lexical innovation as, e.g., a semantic innovation, a new word-formation or idiom or introduce a loan word.

In the first case, the actual context meaning is located inside of the range of an existing semantic invariant: a learned semantic rule is applied to a given context. We can define the criteria for this contextual variation (or "vagueness") and to distinguish it from different senses of one word, i.e. polysemy, and from different words showing an identical signifier, i.e. homonymy. When we decide to use a word although we leave the traditional range of its semantic invariants, we create a semantic innovation. If this innovation is successful, it becomes, in turn, lexicalized as a new invariant of the word in question. The types of polysemy resulting from this diachronic process and the possible semantic relations linking them in synchrony are worth investigating.

6.1.1. Contextual variability of word meaning

When we try to correlate word with meaning, we enter into lot of problems. Let us look at the following examples. The interpretation we give to a particular word form can vary greatly from context to context (Cruse, 2000:104).

1. I went to the bank. (ambiguous because of the two readings for the *bank*: one 'bank of a water body' or 'financial bank')
2.a. The firm built this school. (a building)
2.b.The school won the award last year. (people)
3.a.He was coming down the path to meet me. (perspective)
3.b.I followed a winding path through the woods.
4.a. The child can walk already and she's only 11 months old. (contrasted with standing up unaided, talking, etc.)
4.b. I usually walk to work. (contrasted with driving, going by train, etc.)
Mary's speech was inaudible.
4.b.Mary's speech was interesting.
5.a.Please put this book back on the shelf. (facets)
5.b. I find this book unreadable.
6.a.John planted five roses.
6.b.John picked five roses.
7.a.John ordered a ham sandwich.
7.b. The ham sandwich wants his coffee now. (metonymy)

We raise the following questions in our mind:

1. Do words typically have multiple meanings?
2. How do we decide what constitutes 'a meaning'?
3. Is there a finite number of meanings?
4. How are meanings related to one another?

The answers for these questions are difficult to arrive at. We shall begin by identifying two properties of variant readings of a word which are relevant to the answers to the above questions. We can first of all ask whether there is a sharp semantic boundary between the two readings; a second question is whether they are mutually exclusive. Both these will be taken as distinctness of two readings.

6.1.2. Polysemy

A situation of polysemy arises when one form of a word has multiple meanings which are related by extension. Words that are polysemous have single entries in the dictionary. However, there are numbers

that suggest the list of possible meanings – as shown below: Foot 1 – of a person, 2 – of a bed, 3 – of a mountain

6.1.2.1. Varieties of polysemy

There is by definition a motivated relationship between polysemous senses. There are various ways of classifying the sorts of relation that can hold between polysemous senses. We can distinguish between two types of polysemy: linear and non-linear polysemy (Crues, 2000:).

6.1.2.1.1. Linear polysemy

Autohyponymy, automeronymymy, autosuperordiation and autoholonymy are the different types of linear polysemy.

(1) Autohyponymy

Autohyponymy occurs when a word has a default general sense, and a contextually restricted sense which is more specific in that it denotes a subvariety of the general sense. For example, dog has a geneal sense, "member of canine race" as in *Dog and cat owners must register their pets*, and a more specific reading as in *That's not a dog, it's a bitch*.

(2) Automeronymy

Automeronymy occurs in a parallel way to autohyponymy, except that the more specific reading denotes subpart rather than a subtype. For example, in the sentence *he painted the window*, *window* means the whole of window including its frame, the wooden plank, bars, hinges, etc , whereas in the sentence *he came through the window*, *window* means only the hole like structure of window. Similarly in the sentence *she showed her body*, *body* denotes the whole of the body, whereas, in the sentence *he hurts her body*, *body* denotes a part of the body.

(3). Autosuperodination

An example of autosuperodination is the use of *man* to refer to human race.

(4) Autoholonymy

Discriminating automeronymy from autoholonymy is not easy, because often there seem to have different default readings according to the context. For example, in the sentence, *she scratched her body, body* denotes only part of the body, whereas in the sentence, *she show her body*, body denotes the whole of the body. Similarly, in the senesce she scratched her hand, denotes only part of the arm, whereas in the sentence, *she lost her arm in an accident*, *arm* denotes the whole of arm.

6.1.2.1.2. Non-linear polysemy

Metaphor and metonymy comes under non-linear polysemy.

6.1.2.1.2.1. Metaphor

Many polysemous senses are clearly related metaphorically. A metaphor is a figure of speech that refers, for rhetorical effect, to one thing by mentioning another thing. It may provide clarity or identify hidden similarities between two ideas. Where a simile compares two items, a metaphor directly equates them, and does not use "like" or "as" as does a simile. Metaphors are sometimes constructed through our common language. They are called conventional metaphors. Calling a person a “night owl” or an “early bird” or saying “life is a journey” are common conventional metaphor examples commonly heard and understood by most of us. Below are some more conventional metaphors we often hear in our daily life:

My brother was **boiling mad**. (This implies he was too angry.)
The assignment was **a breeze**. (This implies that the assignment was not difficult.)
It is going to be **clear skies** from now on. (This implies that clear skies are not a threat and life is going to be without hardships)
The skies of his future began to **darken**. (Darkness is a threat; therefore, this implies that the coming times are going to be hard for him.)
Her voice is **music to his ears**. (This implies that her voice makes him feel happy)

6.1.2.1.2.2. Metonymy

Another rich source of poysemous variation is metonymy. Metonymy is a figure of speech in which something is called by a new name that is related in meaning to the original thing or concept. For example, it’s common practice to refer to celebrity life and culture in the United States as “Hollywood,” as in “Hollywood is obsessed with this new diet.” The meaning of this statement is not that the place itself has any obsession, of course, but instead refers to the celebrities and wannabe celebrities who reside there. As noted above, “Hollywood” can act as a metonym for celebrity culture. There are many other place names that act metonymically in the same way, such as “Wall Street” for the financial sector and “Washington” for the United States government. However, there are many more words in common usage that are metonyms. Metonymy can be characterized as figurative use based on association. Here are

different types of metonymy based on different types of associations (Pustejovsky, 1995:31). Pustejovsky, (1995:31) calls them as complementary polysemy:

1. Count-mass metonymy

The **lamb** is running in the field.

John ate **lamb** for breakfast.

2. Container-containee metonymy

Mary broke the **bottle**.

The baby finished the **bottle**.

3. Figure-ground metonymy

The widow is rotting.

Mary crawled through the **widow**.

4. Product-produced metonymy

The **newspaper** fired its editor.

John spilled coffee on the **newspaper**.

5.Plant-food metonymy

May ate a **fig** for lunch.

Mary watered the **figs** in the garden.

6. Process-result metonymy

The company's **merger** with Honda will begin next fall.

The **merger** will produce cars.

7. Place-people metonymy

John travelled to **New York**.

New York kicked the mayor out of office.

6.1.2.1.2.3. Difference between Metonymy and Synecdoche

Metonymy and synecdoche are very similar figures of speech, and some consider synecdoche to be a specific type of metonymy. Synecdoche occurs when the name of a part is used to refer to the whole, such as in “There are hungry mouths to feed.” The mouths stand in for the hungry people. The definition of metonymy is more expansive, including concepts that are merely associated in meaning and not necessarily parts of the original thing or concept.

Metaphor (drawing a similarity between two things) and metonymy (drawing a contiguity between two things) are two fundamental opposite poles along which a discourse with human language is developed. It has been argued that the two poles of similarity and contiguity are fundamental ones along which the human brain is structured; in the study of human language the two poles have been called metaphor and metonymy, while in the study of the unconscious they have been called condensation and displacement. In linguistics, they are connected to the paradigmatic and syntagmatic poles.

6.1.3. Extensions of meaning

Cruse (2000:201-202) under the title extensions of meaning talks about three distinct types of extensions: naturalized, established and nonce extensions.

6.1.3.1. Naturalized extensions

What is historically no doubt an extended meaning may be so entrenched and familiar a part of a language that its speakers no longer feels that a figure of speech is involved at all: such readings of a word (or extension) is said to be naturalized (Cruse, 2000: 201).

He is in love.
It is hard to put into words.
The kettle is boiling.

6.1.3.2. Established extensions

There are readings which are well established and presumably have entries in the mental lexicon, but are none the less felt to be figures of speech:

John's a parasite/a lounge lizard/couch potato.
She **shallow** the story.

There are too many mouths to feed

6.1.3.3. Nonce readings

Nonce readings are ones for which there are no entries in the mental lexicon; therefore cannot be 'looked up', but have to be generated and interpreted using strategies of meaning extension such as metaphor and metonymy. The following are the few examples:

West gave him a look that was heat-seeking, like a missile.
He had never told her his fantasies about being overpowered by her.
Her heart rolled forward at such a pitch, he could not catch up with it.

6.1.4. Semantic change

Semantic change deals with change in meaning. It is understood to be a change in the concepts associated with a word, and has nothing to do with change in the phonetic form of the word form of the word. Semantic change is very difficult to describe and explain. It is unlikely that scholars will ever be able to predict the directions in which particular words will change their meanings. The development of new material and social conditions may cause words to become unnecessary. For example, wimple 'a medieval head-covering' is not used anymore, because there is no need for it. On the other hand a shift of attitudes may render some words socially unacceptable (e.g. frog, Jap, girlie...), while others become highly fashionable or socially relevant (e.g. cool, ecology...). Nonetheless, by looking at a wide range of examples of semantic changes that have happened in the history of the English language, one can begin to develop a certain sense of what kinds of change are likely. Information about the original meaning of the morphemes and the intuition developed from observing various morphemes and the intuition developed from observing various patterns of semantic change will help us make better-informed guesses about the meanings of unfamiliar words that contain familiar morphemes. For example, if we see the word *infomercial* for the first time, what can we say about it? Well, the 1st part is *information* and the 2nd part is *commercial*, so we can at least partially understand its meaning. And what is it actually? It is 'a television programme that is an extended advertisement often including a discussion or demonstration' demonstration.

We shall focus first, on the mechanisms of change-what forces in our society, or what forces in our thinking, typically have brought about semantic change? Then we will turn to a classification of the

results of semantic change, or to put it in other results of semantic change, or to put it in other words, how do these changes affect the lexicon?

6.1.4.1. Mechanisms of semantic change

6.1.4.1.1. Technology and current relevance

When new technology changes the way we conduct our daily life the words which refer to it change also. Consider, for example, the word *compute* and its derivatives - *computer*, *computation*. It used to mean 'to count, to reckon, to calculate'. Indeed the word *count* is a direct descendant (through French) of the Latin verb *computare* 'to count'. The computer, however, is no longer a 'counter': it has given its name to a new branch of science, computer science; we talk of computer addiction, computer-aided design, computer ethics, computer literacy, computer viruses, and even compusex. Computers deal with text, graphics, images, symbols, music; the original meaning of 'counting' in computer language has been completely supplanted by the new associations of ‘computing’. As computers became common, many words changed their meanings because they could conveniently be used to refer to aspects of computing. For example, you can customize your commands, where customize refers to your setting up specialized function keys. The word custom already has many meanings outside this range of computers, e.g. characteristic behaviour of a society, special tax on importing goods, and customer as one who shops at a store.

The word command in customizing our commands is a specialized sense of a word that once meant 'an order given to a person of higher rank to a person of lower rank' – now it means 'to give a signal to the programme by pushing a certain key or clicking the mouse on the right icon'. In defining command we have introduced mouse on the right icon. In defining command, we have introduced two new meanings: mouse and icon. Until the computer age, icon most commonly referred to pictorial representations of sacred personages in the Eastern Orthodox Church. The lively mouse is an input device, it can be mechanical or optical, it is connected through a mouseport, and it can cause mouse elbow. The computer revolution has given rise to new meanings for ordinary words. You can open two windows on your screen select computing can open two windows on your screen, select computing operations from a menu, use hyphenation tools from your tools menu, select a hyperlink, paste a section from one document into another, look something called a clipboard, which is neither clipped, nor a board, you find the bug in your program, you surf the net, and so on.

The computer-related examples are numerous and striking, but the process they illustrate is neither new nor isolated. The word shuttle, whose original meaning is 'a device used in weaving', is more frequently used today in its later, extended figurative meaning of anything that goes back and forth: a shuttle bus, a shuttle flight, the space shuttle, and in politics, shuttle diplomacy. For some less-dramatic examples, think of nineteenth-century meaning of station-wagon, a 'horse-drawn covered carriage'. Another example comes from astrology, and it is the word disaster. Originally, disaster meant 'a bad, unfavorable, star or planet'. It came from astrology, in which the future is supposed to be predicted by configurations of stars. Our faith in such predictions was shuttered long ago, but the word maintains its meaning in a changed society.

Doctor meant 'teacher', from Latin *docere* 'to teach', and in that meaning it survives as an occasional title for professors. The medical sense, now the norm, was acquired gradually from the association with higher education that was characteristic of physicians. *Elegant* originally meant 'one who selects out', based on Latin *elegans*, from the verb *eligere*, 'to choose'. (E L E C T I O N – E L E G A N T, from the same root). Therefore, 'one who picks wisely'. An elegant person, for example, is taken to be elegant because he or she selects clothes and accessories wisely. Adore: It means literally, to speak to. At some point in history, kind of speaking came to be the speech of prayer, speaking to God. Eventually the association went even further: looking toward heaven, imploringly, would now be described as adoration. The point is the root which meant *speak* has come to refer to silent worship, a change brought about by association with prayer.

The connection between *amble* and *ambulance* is an accident of war: ambulance comes from a longer phrase, hospital ambulant, a 'moveable hospital', one which could be present on the battlefield to tend to the wounded. It was battlefield to tend to the wounded. It was merely shortened to the second part of the phrase giving us *ambulance*.

One thing we have to mention here is metonymy. Metonymy is an association of a particular type, usually accidental association in space or time. The real referent and the transferred referent The real referent and the transferred referent are associated by virtue of being in the same place, as when we speak of the White House and we are in fact referring to the current President of the United States and his staff. This association is of both place and time, because The White House can only refer to the present President. Metonymy can be extended to cover changes resulting from other associations such as part and whole - *drink the whole bottle*, *give me a hand*, *live by the sword*…

6.1.4.1.2. Analogy

The association covered by the notion of metonymy is due to a more general cause: analogy. Analogy involves the perception of similarity between some concrete the perception of similarity between some concrete object or process and some abstract concept or process. The basic meaning of a word is related to another meaning in such a way that by analogy there can be a transfer or extension of meaning from one to the other. For example, if someone is the head of a department, the relationship of the head to the body –the literal sense –is being used in an extended or figurative sense, in which there is an analogical ratio set up: head is to body as head (=leader) is to department. It can be seen as an equation can be seen as an equation.

Thus if we say that 'The population is mushrooming all over the world', we are comparing the rapid grow of population to the unmanageable fecundity of a mush room. If we speak of a 'traffic bottleneck', we are comparing some narrowing of traffic flow with the neck of a bottle where the contents flow more slowly. Virtually any perceived similarity can be the basis of analogical change and the source of a new meaning The analogy can be quite remote and even unlikely but if it catches new meaning. The analogy can be uite remote and even unlikely, but if it catches someone's fancy it may easily stick in the language.

e.g.
culminate – reach the top of the hill → to reach a decisive point, after struggling as if climbing.
dependent – hanging from something → supported by virtue of someone else's money or power.
educate – to lead forth, to bring up → to make competent, to raise to a higher social or cultural level
progress – to step forward → to improve, to move toward a better existence
provoke – to call forth → to incite with anger or desire, to irritate
understand – be located beneath → to grasp concept

Analogy is the most frequent and most important source of semantic enrichment of the language. This process could equally be called over-generalization, but loss of specificity has the slight advantage of reflecting a common human failing. All of us are prone to generalizing, prone to failures of specificity. One of the techniques we study when we are learning to write acceptable texts is how to be more specific, how to provide details and examples, how to find the right word for the meaning we have in mind. In every day speech and casual writing, we often choose the more general meaning. This tendency shows up historically when words acquire broader and more general meanings. For example, Guy Fawkes' infamous first name lost its specificity with the proliferation of November 5th effigies of the criminal;

then guys began to be used of males of strange appearance then it was broadened to refer to any males appearance, then it was broadened to refer to any males, and now it is generalized (especially in the plural) to any group of people, including groups of females.

6.1.4.2. Consequence of semantic change

We turn now from the mechanisms of change to the consequences of change. What is the status of a word? Has its reference gone up, or down in its social status and content? One classic example of a word that has risen in status is *knight*, which used to mean, quite simply boy, manservant. *Pretty* came from OE *praettig* "crafty, sly". Rising in status is called amelioration / elevation (from Latin *melior*– 'better'). A development of the meaning in the opposite direction, which is perhaps more frequent, is called *pejoration* (from Latin *pejor* 'worse'). Another type of status is semantic bleaching, where the original meaning of the word has been eroded away and generalized by heavy usage, as in words like *very* (originally *true*), *terrible* (able to cause *terror*).

6.1.4.3. Types of semantic change

We can observe the process of semantic change from two aspects. First, we can observe the changes from the point of view of logic, or, in this sense, we observe the results of semantic change. Here, the results can be studied in the denotative and the connotative meaning.

6.1.4.3.1. Widening or generalization or extension

A semantic change may lead to the widening of the meaning of a word or lexeme (this is usually observable diachronically). For example, *rubbish* in Old English only meant broken stones; present-day expression is wider and covers all kinds of unwanted or left-over property; camp had only the meaning of the military camp. *Office* originally meant 'a service', but today it refers also to a place where someone works. *Novice* originally meant 'a person admitted to a probationery membership in a religious community', but today it refers generally to 'a beginner'. *Dog* originally appeared with the more specific meaning of 'a specific powerful breed of dog', which generalised to include all breeds or races of dogs. *Salary* from Latin salarium was a soldier's allotment of salt (Latin sal=salt), which then came to mean a soldier's wages in general, and then finally wages in general not just soldier'.

6.1.4.3.2. Narrowing or specialization

The semantic change may lead to the narrowing or specialization of the meaning a word or lexeme; the word or lexeme acquires a more specialized meaning. For example, *actor* originally meant someone who does something, but it has changed its meaning into 'one who has a role in a dramatic production'. *Ammunition* originally considered to be military supplies of all kinds, but now it refers to bullets, rockets, that is military supplies that explode. *Meat* originally meant "food" in general an later narrowed its meaning to "food of flesh". *Deer* originally referred to "an animal" (OE dēor-animal). *Girl* originally meant a child or a young person of either sex" in ME period, but in Modern English it narrowed its meaning to a female child. *Starve* originally meant to die (OE steorfan-to die), but today it means to suffer or perish from hunger.

6.1.4.3.3. Branching

In this process the lexeme becomes polysemous; the newly developed sememes coexist, e.g. *head* – mind and mental abilities, part of the body, life (*it cost him his head*), individual person, leader, something resembling the head of the body (*head of cabbage*, *head of nail*), culmination, the top or the beginning of a page or letter, front or prominent part…

6.1.4.3.4. Degeneration / Pejoration

Semantic change results in degeneration or pejoration in which a sense of a word takes on a less positive, more negative evaluation in the minds of the users. e.g. *knave* 'a rogue' < OE: *cnafa* ' a youth, a child' > 'servant' ; *spinster* 'unmarried woman' < 'one who spins'; *silly* 'foolish, stupid' < ME *sely* 'happy, innocent' < OE *sælig* "blessed, blissful'; *disease* 'illness' < 'discomfort' (cf. *dis+ease*)

6.1.4.3.5. Elevation /Amelioration

Semantic change results in elevation or amelioration in which there is a shift in the sense of a word in the direction towards a more positive value in the minds of the users. e.g. ***pretty*** < OE: prættig 'crafty, sly'; *knight* 'mounted warrior serving a king' 'lesser nobility' < OE *cniht* 'boy, servant' >'servant' > 'military servant'.

6.1.4.3.6. Metaphor

Metaphor is a semantic change based on the association of similarity between referents; the meaning is transferred on the basis of the fact that the two referents resemble one another. The basic structure of the metaphor is very simple. There is a thing we are talking about and that to which we are comparing it. Nevertheless, the similarity may involve different types: similarity of shape (*head of a cabbage*), similarity of position or location (foot of a page/mountain), similarity of form and position (the neck of a bottle), similarity of form and function (teeth of a saw, an arm of a robot), similarity of function (*head of department*), similarity in behaviour (*bookworm, wirepuller,* fox), similarity of colour . Consider the following types of similarities: *mouth – mouth of the bottle*; *hand – hand of the chair*; ear – ear of corn; eye – *eye of the coconut*. All metaphoric semantic change involves relationship of perceived similarity. e.g. **root* (of plant) => > root of plant, root of word, root in algebra, source; **stud* => 'good-looking sexy man '(of slang origin) derived from *stud* 'a male animal used for breeding; **chill* => "relax, calm down' of slang origin, original 'to cool'.

6.1.4.3.7. Metonymy

In the case of metonymy (contiguity of meaning), the name of an attribute of a thing is used instead of the thing itself. Metonymic semantic change involves inclusion of additional senses which were originally not present but which are closely associated with word's original meaning. e.g. *tea* => 'drink' => 'evening meal accompanied by drinking tea'; *cheek* 'fleshy side of the face below the eye' < OE: cēace ' jaw, jawbone'. Proper names as metonymy can be illustrated by: *read Shakespeare*; *listen to Mozart*; *it was a Waterloo.*

6.1.4.3.8. Synecdoche

It is a kind of metonymy which involves part-to-whole relationship. Here a part is used to mean the whole, e.g. *have several mouths to feed* – "mouth“ instead of a whole "person"; Leeds defeated Manchester in football - names of the teams are replaced by the name names of the cities. *hand* 'hired hand, employed worker'; *tongue* 'language'.

6.1.4.3.9. Others

Other types of meaning transfer are:
Eponymy (functional change) – common words are derived from proper nouns, e.g.: *sandwich, china, bikini, rugby, White House* (American government).

Personification – assigning human qualities to things, e.g.: *the paper says*…

Euphemisms – the need for a less expressive word, substitution of words which can be harmful for words with milder connotations, e.g.: restroom (toilet), pass away (die), sleep with … (have a sexual intercourse with…)

Taboo replacement and avoidance of obscenity

In order to avoid obscenity, a taboo word is replaced by a non-taboo word. e.g. *ass* 'long-eared animal related to a horse' => *donkey*; *cock* 'adult male chicken' => *rooster*, *bloody nose* => *blood nose/bleeding nose; toilet* : *WC, bathroom, lavatory, restroom, loo, john*

Hyperbol: Hyperbole is a shift in meaning due to exaggeration by overstatement. The exaggeration of meaning in the statement need not be taken literally. E.g. *wait for ages, weight a ton*; *I'll kill him when I see him*… Litotes – the opposite of hyperbole, the understatement which can be often ironical or moderating, e.g.: It wasn't bad (in the sense of It was good), She's not stupid (She's rather smart); using *terribly, horribly, awfully* to mean 'very'.

Litotes

Litotes is an exaggeration by understatement. Litotes is opposite of hyperbole, the understatement which can be often ironical or moderating. e.g. *It wasn't bad* (in the sense of It was good), *She's not stupid* (*She's rather smart*).

6.1.4.4. Causes of meaning change

The phenomenon of semantic change must have its cause, the motivating factor that propels the change to happen. In the study of the lexicon we distinguish two main causes:

6.1.4.4.1. Linguistic causes

English has its general tendencies and development patterns, which cause certain semantic changes. The tendency of language economy is apparent in ellipsis: a phrase is made of two words, but the meaning of one of the words is gradually transferred to its partner, so one word can stand for the whole phrase, e.g. *to be expecting* (*to be expecting a baby*), *to propose* (*to propose to marry*). Language economy is also responsible for the tendency of differentiating of synonymy – *time* and *tide* used to be synonymous, today they differ considerably. Analogy: when one member of a synonymic set acquires a new meaning, the other members acquire it, too: when the word *catch* acquired the meaning of understand, its synonyms *get, grasp* acquired the new meaning as well. Today all three words also mean 'to understand'.

6.1.4.4.2. Extra-linguistic causes

Change of lexicon is most strongly pushed by the changes in the society, the speech community, the culture. The changes can be political, social, and economic. Institutions are being established and abolished, objects appear and disappear, and phenomena come and go. In most cases the words denoting the disappearing objects or events stay in the language, but their meaning is shifted, e.g.: car originally named today it is auto; *atom* originally (in Greek) meant invisible, today it's *atóm*, small matter particle.

The following semantic changes need to be taken into consideration:

Semantically related words often undergo parallel semantic shifts. For example, various words which meant 'rapidly' in Old English and Middle English shifted their meaning to 'immediately'.
Spatial/locative words may develop temporal senses: *before, after, behind*. Also, spatial terms often develop from body-part terms, as in *ahead of, in the back of, at the foot of*.
Word having to do with the sense of touch may typically develop meanings involving the sense of taste: *sharp, crisp*.
Words involving the sense of taste may develop extended senses involving emotions in general: *bitter, sour, sweet.*

see > understand, know.
hear > understand, obey.
body > person..

LEARNING ACTIVITY 6.1.

(1) Explain the contextual variability of word meaning
(2) Explain the phenomenon of polysemy.
(3) Describe the varieties of polysemy.
(4) Describe extensions of meaning.
(5) Describe the mechanisms of semantic change.
(6) Describe the results of semantic change.
(7) Describe the types of semantic change.
(8) Describe the causes of semantic change.

6.2. Lexicon

Semantics is a branch of linguistics studying the meaning of words while lexicon is a dictionary that includes or focuses on lexemes. Semantics is a branch of linguistics studying the meaning of words while lexicon is the vocabulary of a language.

6.2.1. Dictionary and thesaurus

6.2.1.1. Dictionary

A dictionary is a collection of words on one or more specific languages, often alphabetically (or by radical and stroke for ideographic languages), with usage of information, definitions, etymologies, phonetics, pronunciations, translation, and other information; or a book of words in one language with their equivalents in another, also known as a lexicon. It is a lexicographical product designed for utility and function, curated with selected data, presented in a way that shows inter-relationship among the data. A broad distinction is made between general and specialized dictionaries. Specialized dictionaries do not contain information about words that are used in language for general purposes—words used by ordinary people in everyday situations. Lexical items that describe concepts in specific fields are usually called terms instead of words, although there is no consensus whether lexicology and terminology are two different fields of study. In theory, general dictionaries are supposed to be semasiological, mapping word to definition, while specialized dictionaries are supposed to be onomasiological, first identifying concepts and then establishing the terms used to designate them. In practice, the two approaches are used for both types. There are other types of dictionaries that don't fit neatly in the above distinction, for instance bilingual (translation) dictionaries, dictionaries of synonyms (thesauri), or rhyming dictionaries. The word dictionary (unqualified) is usually understood to refer to a monolingual dictionary of general-purpose.

A different dimension on which dictionaries (usually just general-purpose ones) are sometimes distinguished is whether they are *prescriptive* or *descriptive*, the latter being in theory largely based on linguistic corpus studies—this is the case of most modern dictionaries. However, this distinction cannot be upheld in the strictest sense. The choice of headwords is considered itself of prescriptive nature; for instance, dictionaries avoid having too many taboo words in that position. Stylistic indications (e.g. ‘informal’ or ‘vulgar’) present in many modern dictionaries is considered less than objectively descriptive as well. Although the first recorded dictionaries date back to Sumerian times (these were bilingual dictionaries), the systematic study of dictionaries as objects of scientific interest themselves is a 20th-century enterprise, called lexicography, and largely initiated by Ladislav Zgusta. The birth of the new discipline was not without controversy, the practical dictionary-makers being sometimes accused by others of "astonishing" lack of method and critical-self-reflection.

The lexicon presents an ordered mental list of words available to a language user. As we have observed earlier, when the lexicon is externalised and generalised, it becomes the dictionary. The information provided in the lexicon or the dictionary covers the phonological, morphological, syntactic and semantic characteristics of the lexical items.

Phonological information guides us in pronunciation; morphological information refers to the formation of the word while syntactic information focuses on the categorical features as well as the distributional possibilities of the word. Semantic information relates to the meaning of the word.

When we focus on the features of words, we deal on the specific groups such as nouns, verbs, adjectives, adverbs, pronouns, conjunctions, prepositions etc. It is possible to classify words as content and form words. Content words have independent meaning, even in isolation. Content words have an open class system as they can accept new entries. For instance, in the age of Information and Communication Technology, such new words as *laptop, face book, disc drive* have been added to the dictionary of English. Form words also called function or grammatical words do not have independent meaning when they occur in isolation. Such words are used to signal syntactic or grammatical relationship within larger structures. Form words belong to a closed system because they cannot be expanded. They are also very few in number. They include-pronouns, auxiliaries, conjunctions, prepositions, determines and particles.

Another way to classify words is to describe them as transparent or opaque. The meaning of transparent words can be deduced from the meaning of their constituent parts.

e.g

Prefix Stem Suffix

un - god - liness

dis - satisfy(y) action

The meaning of opaque words cannot be determined from their constituent parts. Most opaque words are also structural, grammatical or form words.

6.2.1.2. Thesaurus

In general usage, a thesaurus is a reference work that lists words grouped together according to similarity of meaning (containing synonyms and sometimes antonyms), in contrast to a dictionary, which provides

definitions for words, and generally lists them in alphabetical order. The main purpose of such reference works is to help the user "to find the word, or words, by which [an] idea may be most fitly and aptly expressed" – to quote Peter Mark Roget, architect of the best known thesaurus in the English language. Although including synonyms, a thesaurus should not be taken as a complete list of all the synonyms for a particular word. The entries are also designed for drawing distinctions between similar words and assisting in choosing exactly the right word. Unlike a dictionary, a thesaurus entry does not give the definition of words. In library science and information science, thesauri have been widely used to specify domain models. Recently, thesauri have been implemented with Simple Knowledge Organization System (SKOS).

Dictionary

A dictionary is a collection of words along with their meaning, definition and description of usage. A thesaurus presents words as "word families," listing their synonyms without explaining their meanings or usage. Thesauri may list words alphabetically or conceptually. A dictionary is used to look up the meaning of a particular word, say when want to know what a word means, or the various contexts in which it may be used differently, what part or parts of speech it is, etc. A dictionary gives thorough details on the meaning, definition, usage and etymology of a word. A thesaurus usually does not contain all the words of the language. It provides several similar alternative words (synonyms), as well as contrasting words (antonyms). A thesaurus is also a useful resource when you know the meaning of the word but not the word itself.

6.2.2. Semantic lexicon

A semantic lexicon is a dictionary of words labeled with semantic classes so associations can be drawn between words that have not previously been encountered: it is a dictionary with a semantic network. WordNet is a example for semantic lexicon.

6.2.2.1. WordNet

WordNet is a lexical database for the English language. It groups words into sets of synonyms called synsets, provides short definitions and usage examples, and records a number of relations among these synonym sets or their members. WordNet can thus be seen as a combination of dictionary and thesaurus. While it is accessible to human users via a web browser, its primary use is in automatic text analysis and

artificial intelligence applications. The database and software tools have been released under a BSD style license and are freely available for download from the WordNet website. Both the lexicographic data (lexicographer files) and the compiler (called grind) for producing the distributed database are available.

6.2.2.1.1. Computers and the Lexicon

Until recently only dictionaries in printed book format represented the lexicon of a language. These are meant to show the lexicon's structure; rather, they facilitate the looking up of words and enable the user to find information about spelling, meaning, and use. Access to particular word is through their spelling, so dictionaries and lexicons must fulfill their purpose via an organization based on orthographic principles. On the other hand, WordNet is a semantic dictionary that is designed as a network, partly because representing words and concepts as an interrelated system seems to be consistent with evidence for the way speakers organize their mental lexicons. The first lexical reference book that took meaning as its organizing principle was Roget's thesaurus. Thesauruses are built around concepts and are designed to help users find the "right" word when they have a concept in mind. By contrast, dictionaries are books designed to give users information about words and to help them understand the concepts behind unfamiliar words they have encountered. WordNet is neither a traditional dictionary nor a thesaurus but combines features of both types of lexical reference resources.

6.2.2.1.2. WordNet as a thesaurus

WordNets design resembles that of a thesaurus in that its building block is a synset consisting of all the words that express a given concept. Thus, the user of a WordNet who has a given concept in mind can find, by calling up one of the words expressing this concept, other words that lexicalize the same concept. But WordNet does much more than lists concepts in the form of synsets. The synsets are linked by means of a number of relations, including hyponymy, meronymy, and entailment. Different kinds of semantic oppositions lumped together in the antonymy relation link words only, rather than concepts. WordNet thus clearly separates the conceptual and the lexical levels, and this distinction is reflected in the one between semantic-conceptual and lexical relations that hold among systets and words, respectively. Unlike thesaurus, the relations between concepts and words in WordNet are made explicit and labeled; users select the relation that guides them from one concept to the next and choose the direction of their navigation in conceptual space. Words express concepts, and the lexicon is constrained by the kinds of concepts that are available to us by virtue of our perception of, and interaction with, the world around us. WordNet differs from thesauruses, where only lexicalized concepts are accounted for.

6.2.2.1.3. WordNet as a dictionary

In some respects, WordNet resembles a traditional dictionary. For example, WordNet gives definitions and sample sentences for most of its synsets. WordNet also contains information about morphologically related words. WordNet's goals differ little from those of a good standard college-level dictionary, and the semantics of WordNet is based on the notion of sense that lexicographers have traditionally used in writing dictionaries. It is in the organization of that information that WordNet aspires to innovation (Miller, 1998). WordNet does not give pronunciation, derivation morphology, etymology, usage notes, or pictorial illustrations. WordNet does however, try to make the semantic relation between word senses more explicit and easier to use.

6.2.2.1.4. Relations in wordnet

WordNet makes the commonly accepted distinction between conceptual-semantic relations, which link concepts, and lexical relations, which link individual words. The mental lexicon tends to build semantic networks with conceptual-semantic relations, whereas workers focusing on lexical aspects use primarily lexical, word-word relations. WordNet is organized by semantic relations. Since a semantic relation is a relation between meanings, and since meanings can be represented by synsets, it is natural to think of semantic relations as pointers between synsets. It is characteristic of semantic relations as pointers between synsets. WordNet does not contain syntagmatic relations linking words form different syntactic categories. The four major syntactic categories (Noun, Verb, Adjective, Adverb) are treated separately. Nouns are organized in lexical memory as topical hierarchies, verbs are organized by a variety of entailment relations, and adjectives and adverbs are organized as N-dimensional hyperspaces.

WordNet includes the lexical categories nouns, verbs, adjectives and adverbs but ignores prepositions, determiners and other function words. Words from the same lexical category that are roughly synonymous are grouped into synsets. Synsets include simplex words as well as collocations like "eat out" and "car pool." The different senses of a polysemous word form are assigned to different synsets. The meaning of a synset is further clarified with a short defining *gloss* and one or more usage examples. An example adjective synset is: good, right, ripe – (most suitable or right for a particular purpose; "a good time to plant tomatoes"; "the right time to act"; "the time is ripe for great sociological changes"). All synsets are connected to other synsets by means of semantic relations. These relations, which are not all shared by all lexical categories, include:

Nouns

hypernyms: *Y* is a hypernym of *X* if every *X* is a (kind of) *Y* (*canine* is a hypernym of *dog*)
hyponyms: *Y* is a hyponym of *X* if every *Y* is a (kind of) *X* (*dog* is a hyponym of *canine*)
coordinate terms: *Y* is a coordinate term of *X* if *X* and *Y* share a hypernym (*wolf* is a coordinate term of *dog*, and *dog* is a coordinate term of *wolf*)
meronym: *Y* is a meronym of *X* if *Y* is a part of *X* (*window* is a meronym of *building*)
holonym: *Y* is a holonym of *X* if *X* is a part of *Y* (*building* is a holonym of *window*)
Verbs
hypernym: the verb *Y* is a hypernym of the verb *X* if the activity *X* is a (kind of) *Y* (*to perceive* is an hypernym of *to listen*)
troponym: the verb *Y* is a troponym of the verb *X* if the activity *Y* is doing *X* in some manner (*to lisp* is a troponym of *to talk*)
entailment: the verb *Y* is entailed by *X* if by doing *X* you must be doing *Y* (*to sleep* is entailed by *to snore*)
coordinate terms: those verbs sharing a common hypernym (*to lisp* and *to yell*)
These semantic relations hold among all members of the linked synsets. Individual synset members (words) can also be connected with lexical relations. For example, (one sense of) the noun "director" is linked to (one sense of) the verb "direct" from which it is derived via a "morphosemantic" link.
The morphology functions of the software distributed with the database try to deduce the lemma or stem form of a word from the user's input. Irregular forms are stored in a list, and looking up "ate" will return "eat," for example.

6.2.2.1.5. Knowledge structure

Both nouns and verbs are organized into hierarchies, defined by hypernym or *IS A* relationships. For instance, one sense of the word *dog* is found following hypernym hierarchy; the words at the same level represent synset members. Each set of synonyms has a unique index.

dog, domestic dog, Canis familiaris
=> canine, canid
=> carnivore
=> placental, placental mammal, eutherian, eutherian mammal
=> mammal
=> vertebrate, craniate
=> chordate
=> animal, animate being, beast, brute, creature, fauna

=> ...

At the top level, these hierarchies are organized into 25 beginner "trees" for nouns and 15 for verbs (called *lexicographic files* at a maintenance level). All are linked to a unique beginner synset, "entity." Noun hierarchies are far deeper than verb hierarchies. Adjectives are not organized into hierarchical trees. Instead, two "central" antonyms such as "hot" and "cold" form binary poles, while 'satellite' synonyms such as "steaming" and "chilly" connect to their respective poles via a "similarity" relations. The adjectives can be visualized in this way as "dumbbells" rather than as "trees."

6.2.2.1.6. Lexical hierarchy

Information about hyponymic relations between nouns is given in the definitional phrases of conventional dictionaries.

robin – a migratory bird that has a clear melodious song and a reddish breast with gray or black upper plumage.
bird – a warm-blooded egg-laying animal having feathers and forelimbs modified as wings.
animal – an organism capable of voluntary movement and possessing sense organs and cells with noncellulose walls.
organism - a living entity

Each hypernym leads on to a more generic hypernym. Hypernym cannot be represented as a simple relation between word forms. Hypernymy is a relation between lexicalized concepts, a relation that is represented in Wordnet by a pointer between the appropriate synsets. A lexical hierarchy can be reconstructed by following the trail of hypernumically related synsets.

{robin, redbreast} @ {bird} @ {animal, animate_being} @ {organism, life_from, living_thing}

For each hypernymic relation we can add a corresponding hyponymic relation that points in the opposite direction. What emerges from this manner of representing hyponymy and hypernymy is a lexical hierarchy. Hierarchies of these sorts are widely used by computer scientist as a means of representing knowledge. The nouns in WordNet from a lexical inheritance system; a systematic effort has been made to connect hyponyms with their hypernyms (and vice versa). WordNet presupposes a linguistic knowledge of anaphoric relations; an anaphor can be a hypernym of its antecedent.

I thought it was robin but the bird flew away before I could get close enough to be sure.

More generally, a hypernym can replace a more specific term whenever the context ensures that the substitution will not produce confusion.

6.2.2.1.7. Psycholinguistic aspects of WordNet

The initial goal of the WordNet project was to build a lexical database that would be consistent with theories of human semantic memory developed in the late 1960s. Psychological experiments indicated that speakers organized their knowledge of concepts in an economic, hierarchical fashion. Retrieval time required to access conceptual knowledge seemed to be directly related to the number of hierarchies the speaker needed to "traverse" to access the knowledge. Thus, speakers could more quickly verify that *canaries can sing* because a canary is a songbird ("sing" is a property stored on the same level as "canary"), but required slightly more time to verify that *canaries can fly* (where they had to access the concept "bird" on the superordinate level) and even more time to verify *canaries have skin* (requiring look-up across multiple levels of hyponymy, up to "animal"). While such experiments and the underlying theories have been subject to criticism, some of WordNet's organization is consistent with experimental evidence. For example, anomic aphasia selectively affects speakers' ability to produce words from a specific semantic category, a WordNet hierarchy. Antonymous adjectives (WordNet's central adjectives in the dumbbell structure) are found to co-occur far more frequently than chance, a fact that has been found to hold for many languages.

6.2.2.1.8. WordNet as a lexical ontology

WordNet is sometimes called an ontology, a persistent claim that its creators do not make. The hypernym/hyponym relationships among the noun synsets can be interpreted as specialization relations among conceptual categories. In other words, WordNet can be interpreted and used as a lexical ontology in the computer science sense. However, such an ontology should normally be corrected before being used since it contains hundreds of basic semantic inconsistencies such as (i) the existence of common specializations for exclusive categories and (ii) redundancies in the specialization hierarchy. Furthermore, transforming WordNet into a lexical ontology usable for knowledge representation should normally also involve (i) distinguishing the specialization relations into subtypeOf and instanceOf relations, and (ii) associating intuitive unique identifiers to each category. Although such corrections and transformations have been performed and documented as part of the integration of WordNet 1.7 into the cooperatively

updatable knowledge base of WebKB-2, most projects claiming to re-use WordNet for knowledge-based applications (typically, knowledge-oriented information retrieval) simply re-use it directly.

WordNet has also been converted to a formal specification, by means of a hybrid bottom-up top-down methodology to automatically extract association relations from WordNet, and interpret these associations in terms of a set of conceptual relations, formally defined in the DOLCE foundational ontology. In most works that claim to have integrated WordNet into ontologies, the content of WordNet has not simply been corrected when it seemed necessary; instead, WordNet has been heavily re-interpreted and updated whenever suitable. This was the case when, for example, the top-level ontology of WordNet was re-structured according to the OntoClean based approach or when WordNet was used as a primary source for constructing the lower classes of the SENSUS ontology.

6.2.2.1.9. Limitations

WordNet does not include information about the etymology or the pronunciation of words and it contains only limited information about usage. WordNet aims to cover most of everyday English and does not include much domain-specific terminology. WordNet is the most commonly used computational lexicon of English for word sense disambiguation (WSD), a task aimed to assigning the context-appropriate meanings (i.e. synset members) to words in a text.[9] However, it has been argued that WordNet encodes sense distinctions that are too fine-grained. This issue prevents WSD systems from achieving a level of performance comparable to that of humans, who do not always agree when confronted with the task of selecting a sense from a dictionary that matches a word in a context. The granularity issue has been tackled by proposing clustering methods that automatically group together similar senses of the same word.

6.2.3. Generative Lexicon

The generative lexicon (shortly GL) presents a novel and exciting theory of lexical semantics that addresses the problem of the “multiplicity of word meaning”- that is, how we are able to give an infinite number of senses to words with finite means. As the first formally elaborated theory of generative approach to word meaning, it lays the foundation for an implemented computational treatment of word meaning that connects explicitly to a compositional semantics. In contrast to static view of word meaning (where each is word is characterized by a predetermined number of word senses) that imposes a tremendous bottleneck on the performance capability of any natural language processing, Pustejovsky proposes that the lexicon becomes an active and central component in the linguistic description. The

essence of his theory is that the lexicon functions generatively, first by providing a rice and expressive vocabulary for characterizing lexical information; then by developing a frame work for manipulating fine-grained distinctions in word descriptions; and finally, by formalizing a set of mechanisms for specialized composition of aspects of such description of words, as they occur in context, extended and novel senses are generated.

According to Pustejovsky (1995:5) the most pressing problem in lexical semantics are the following:

> Explaining the polymorphic nature of language
> Characterizing the semanticality of natural language utterances
> Capturing the creative use of words in novel contexts
> Developing a richer, co-compositional semantic representation

Pustejovsky (2001:56) characterize a generative lexicon as a computational system involving at least the following levels of representation:

> ARGUMENT STRUCTURE: Specification of number and type of logical arguments
> EVENT STRUCUTE: Definition of the event type of an expression and its subeventual structure
> QUALIA STRUCTURE: A structural differentiation of the predicative force for a lexical item
> LEXICAL INHERITANCE STRUCTURE: Identification of how a lexical structure is related to other structures in this type of lattice

Pustejovsky (2001:56) assumes that word meaning is structured on the basis of four generative factors, or qualia roles, that capture how humans understand objects and relations in the world and provide the minimal explanation for the linguistic behaviour of lexical items.

> CONSTITUTIVE: the relation between an object and its constituent parts
> FORMAL: the basic category that distinguishes the object within a larger domain
> TELIC: the object's purpose and function
> AGENTIVE: factors involved in the object's origin or "coming into being."

The qualia structure is the core of the generative properties of the lexicon, because it provides a general strategy for creating increasingly specific concepts with conjunctive properties. A simple schematic description of a lexical item, α, using this representation is shown below:

α
ARGSTR = ARG1=x
...
CONST = what x is made of
QUALIA = FORMAL = what x is
TELIC = function of x
AGENTIVE = how x come into being

The lexical structure for *book* as an object can then be represented as follows:

book
ARG1= y:information
ARGSTR = ARG2= x:phys_obj
information.phy_obj
FORM = holds (x,y)
QUALIA = TELIC = read (e,w,x.y)
AGENT = write (e', v, x, y)

Pustejovsky defines the semantics of a lexical item as a structure involving different components. One of these is qualia structure, which is rich and structured representation of the rational force of a lexical item. What is peculiar about GL is that qualia permit a much richer description of meaning than either a simple decompositional view or a purely relational approach to word meaning allow. That is, it expresses different/orthogonal aspects of word meaning instead of a one-dimensional inheritance (even multiple), which can only capture standard hyponymy/hypernymy relations. The adequacy of qualia relations for capturing key aspect of word meaning becomes apparent when consulting dictionary definitions. The elements of meaning easily map on dimension(s) expressed via qualia roles. Furthermore, these relations become particularly crucial for those sense definitions which have an underspecified genus term. Not all dimension of meaning are always explicitly expressed in the definition of a lexical item. Some of them are inherited by virtue of its membership to a semantic type. Although qualia relations easily emerge form dictionary definition, the formal expression of a specific value for a quale is sometimes quite problematic.

LEARNING ACTIVITY 6.2

(i) Explain the contextual variability of word meaning
(ii) What is meant by polysemy? Explain.
(iii) Discuss about the dynamics of semantic change.

(iv) Differentiate the lexicon from semantic lexicon

(v) Describe the need for the theory of generative lexicon.

SUMMARY

Under dynamics of word meaning you have learnt about contextual variability of word meaning, polysemy, extensions of meaning and semantic change. Under lexicon you have learnt about know about the conventional dictionaries, semantic lexicon such as wordNet and theory of generative lexicon

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Unit 7

GRAMMATICAL SEMANTICS AND SENTENTIAL SEMANTICS

CONTENT

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7.2. Sentential Meaning

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OVERVIEW

The exploration of meaning in human languages has traditionally focused on the relation between linguistic forms and what they refer to in the world. Most approaches to formal semantics have been driven by this preoccupation. Recent years, however, have seen the growth of a parallel preoccupation, that of exploring the relation between patterns of meaning and grammatical structure, leading to the search for a restricted subset of meanings that interact with the grammatical system of human languages. Grammatical semantics addresses the meaning of major grammatical categories, grammatical meaning associated with nouns and noun phrases, the grammatical meaning associated with verbs, adjectives and properties and semantics of quantification. We do not communicate with isolated words. Indeed, knowledge of language and the art of communication depend on our ability to combine words in a systematic way. When words are confined, we achieve sentential meaning. The study of semantics is also expected to explore meaning at this level.

LEARNING OBJECTIVES

At the end of this unit, you should be able to:
(i) know the meaning of major grammatical categories
(ii) know the grammatical meaning associated with nouns and noun phrases
(iii) know the grammatical meaning associated with verbs
(iv) know the adjectives and properties
(v) know the semantics of quantification
(i) identify different issues related to the meaning of the sentence;
(ii) explain major concepts in the meaning of sentences; and
(iii) demonstrate the ability to apply these concepts in real language situation.

7.1.Grammatical semantics

7.1.1. Lexical meaning and Grammatical meaning

The sentence *A dog barked* above is a meaningful sentence which is composed of smaller meaningful parts. One of the smaller parts is the phrase *a dog* which refers to a certain animal. We call this phrase a referring expression. A referring expression is a piece of language that is used as if it is linked to something outside language, some living or dead entity or concept or group of entities or concepts. The entity to which the referring expression is linked is its referent. Another meaningful part is the verb *bark*, which is also linked to something outside of language, an activity associated, here, with the referring expression a *dog*. We call this meaningful part a predicate. The use of language generally involves naming or referring to some entity and saying, or predicating, something about that entity. The sentence also has several kinds of grammatical meanings. Every language has a grammatical system and different languages have somewhat different grammatical systems. We can best explain what grammatical meanings are by showing how the sentence *A dog barked* differs from other sentences that have the same, or a similar, referring expression and the same predicate.

Grammatical meanings, then, are expressed in various ways: the arrangement of words (referring expression before the predicate, for instance), by grammatical affixes like the *-s* attached to the noun *dog* and the *-ed* attached to the verb *bark*, and by grammatical words, or function words, like the ones illustrated in these sentences: do (in the form did), not, a, some, and the. Now let's return to *dog* and *bark*. Their meanings are not grammatical but lexical, with associations outside language. They are lexemes. A lexeme is a minimal unit that can take part in referring or predicating. All the lexemes of a language constitute the lexicon of the language, and all the lexemes that you know make up your personal lexicon. The term 'lexeme' was proposed by Lyons (1977:18–25) to avoid complexities associated with the vague word 'word.'

(a) go, going, went, gone
(b) put up with, kick the bucket, dog in the manger

How many words are there in group (a)? Four or one? There are four forms and the forms have four different meanings, but they have a shared meaning, which is lexical, and other meanings of a grammatical nature added to the lexical meaning. We say that these four forms constitute one lexeme which, for convenience we designate as *go*. Group (b) presents a different sort of problem. The expression *put up with* combines the forms of *put* and *up* and *with*, but its meaning is not the combination of their separate meanings. Therefore *put up with*, in the sense of 'endure,' 'tolerate,' is a single lexeme. The same must be true of *kick the bucket* meaning 'die' and *dog in the manger* when it refers to a person who will not let others share what he has, even though he does not use it himself.

We do not communicate with isolated words. Indeed, knowledge of language and the art of communication depend on our ability to combine words in a systematic way. When words are confined, we achieve sentential meaning. The study of semantics is also expected to explore meaning at this level. This is the purpose of this unit. Sense or lexical relations are concerned with the meaning of individual words. However, as we observed in the unit on semantic theories, the function of theories of meaning includes the explication of sentences. A great deal of the problems of communication derives from the confusion at the level of sentences. It is, therefore, important that students of language should explore sources of these problems.

We studied lexical meaning as the meaning of word without paying attention to the way that is used or to the words that occur with it. Grammatical meaning refers to that part of meaning which indicates grammatical relationship or functions, such as tense meaning, singular meaning, etc. Grammatical meaning consists of word class, for example, modern (adjective), modernize (verb) and modernization (noun). and inflectional paradigm, for example, grammatical meaning of plurality (e.g. desks, data). Lexical meaning is dominant is content word, whereas grammatical meaning is dominant is function words, but in neither grammatical absent. Take for example *love, laugh, take* and *work*; they are different from the point of view of lexical meaning, whereas they are same form the point of view of grammatical meaning (i.e. all are verbs). Similarly, *boy* and *boys* are same from the point of view of lexical meaning, but are different from the point of view of grammatical meaning (i.e. *boys* contain plural marker). Lexical meaning is studied in lexicon whereas grammatical meaning is studied in grammar. But grammar and lexicon are interrelated. Grammar reflects the ways in which lexicon operates as means of communication and as instruments of thought. Part of the meaning of the lexicon is encoded in the grammatical structure of languages. The grammatical system makes possible the expression of meaning like the following:

1. Statement vs. Question

A dog barked vs. Did a dog barked?

2. Affirmative vs. negative

A dog barked. A do did not bark. No dog barked.

3. Past vs. present

A dog barked vs. A dog barks

4. Singular vs. plural

A dog baked vs. Some dogs barked.

5. The indefinite vs. definite

A dog barked vs. The dog barked.

7.1.2. The meaning of major grammatical categories

Traditionally, syntactic categories are defined semantically: nouns are defined as words referring to "persons, places or things", verbs are "doing words", that is, they refer to actions, whereas adjectives are "describing words" (Cruse, 2000: 267). In early structuralist linguistics such definitions were shown to be seriously flawed: *punch* refer to an action, but is a noun; *seem* is a verb, but does not refer to an action; in *John shouted*, *shouted* describes what John did, but is not an adjective, and so on. It was recommended that syntactic categories should be defined on syntactic criteria: for instance, nouns are inflected for number, gender and case and take articles as modifiers; verbs are inflected for tense and aspects, etc. Connections with semantics were held to be non-systematic. More recently, the question of the semantic basis of categories has been raised once again.

7.1.3. Grammatical meaning associated with nouns and noun phrases

Certain types of meaning are typically carried by grammatical elements - inflections, clitics, or markers - associated with nouns or noun phrases. The most important of these are: definiteness, number, animacy, gender and functional roles (Cruse 2000: 269).

7.1.3.1. Definiteness

In linguistics, definiteness is a semantic feature of noun phrases (NPs), distinguishing between referents/entities that are identifiable in a given context (definite noun phrases) and entities which are not (indefinite noun phrases). In English, for example, definite noun phrases preclude asking "which one?". There is considerable variation in the expression of definiteness across languages and some languages do not express it at all. For example, in English definiteness is usually marked by the selection of determiner. Certain determiners, such as a/an, many, any, either, and some typically mark an NP as indefinite. Others, including the, this, every, and both mark the NP as definite. In some other languages, the marker is a clitic that attaches phonologically to the noun (and often to modifying adjectives), e.g. the Hebrew definite article ha- or the Arabic definite article al-. In yet other languages, definiteness is indicated by affixes on the noun or on modifying adjectives, much like the expression of grammatical number and grammatical case. In these languages, the inflections indicating definiteness may be quite complex. In the Germanic languages and Balto-Slavic languages, for example (as still in modern German and Lithuanian), there are

two paradigms for adjectives, one used in definite noun phrases and the other used in indefinite noun phrases. In some languages, e.g. Hungarian, definiteness is marked on the verb.

7.1.3.2. Number

Number is an inflectional category of nouns or noun phrases, which is not found in all languages. Semantically, number system are concerned, one way or another, with how many there are of some item. Number system are no to be confused with numerical system, which are linguistic devices for counting (one, two, forty-three, one hundred and ninety, etc.); obviously numerals are syntactically an semantically distinct from number markers.

The number system in English has only two terms: singular and plural. A majority of languages have three-term number system including dual, used for just two things. A very small minority have four-term systems, in which the fourth term is either a trial (for three things) or a paucal (for a few things).

7.1.3.3. Count nouns and mass nouns

In linguistics, a mass noun, uncountable noun, or non-count noun is a noun with the syntactic property that any quantity of it is treated as an undifferentiated unit, rather than as something with discrete subsets. Non-count nouns are distinguished from count nouns. Given that different languages have different grammatical features, the actual test for which nouns are mass nouns may vary between languages. In English, mass nouns are characterized by the fact that they cannot be directly modified by a numeral without specifying a unit of measurement, and that they cannot combine with an indefinite article (a or an). Thus, the mass noun "water" is quantified as "20 liters of water" while the count noun "chair" is quantified as "20 chairs". However, both mass and count nouns can be quantified in relative terms without unit specification (e.g., "so much water," "so many chairs"). Some mass nouns can be used in English in the plural to mean "more than one instance (or example) of a certain sort of entity"—for example, "Many cleaning agents today are technically not soaps, but detergents." In such cases they no longer play the role of mass nouns, but (syntactically) they are treated as count nouns. Some nouns have both a mass sense and a count sense (for example, paper).

In English (and in many other languages), there is a tendency for nouns referring to liquids (water, juice), powders (sugar, sand), or substances (metal, wood) to be used in mass syntax, and for nouns referring to objects or people to be count nouns. This is not a hard-and-fast rule, however; mass nouns such as

furniture and cutlery, which represent more easily quantified objects, show that the mass/count distinction should be thought of as a property of the terms themselves, rather than as a property of their referents. For example, the same set of chairs can be referred to as "seven chairs" and as "furniture"; although both chair and furniture are referring to the same thing, the former is a count noun and the latter a mass noun. The Middle English mass noun peas has become the count noun pea by morphological reanalysis.

For another illustration of the principle that the count/non-count distinction lies not in an object but rather in the expression that refers to it, consider the English words "fruit" and "vegetables". The objects that these words describe are, objectively speaking, similar (that is, they're all edible plant parts); yet the word "fruit" is (usually) non-count, whereas "vegetables" is a plural count form. One can see that the difference is in the language, not in the reality of the objects. Meanwhile, German has a general word for "vegetables" that, like English "fruit", is (usually) non-count: das Gemüse. British English has a slang word for "vegetables" that acts the same way: "veg" [rhymes with "edge"].

Many English nouns can be used in either mass or count syntax, and in these cases, they take on cumulative reference when used as mass nouns. For example, one may say that "there's apple in this sauce," and then apple has cumulative reference, and, hence, is used as a mass noun. The names of animals, such as "chicken", "fox" or "lamb" are count when referring to the animals themselves, but are mass when referring to their meat, fur, or other substances produced by them. (e.g., "I'm cooking chicken tonight" or "This coat is made of fox.") Conversely, "fire" is frequently used as a mass noun, but "a fire" refers to a discrete entity. Substance terms like "water" which are frequently used as mass nouns, can be used as count nouns to denote arbitrary units of a substance ("Two waters please") or of several types/varieties ("waters of the world"). One may say that mass nouns that are used as count nouns are "countified" and that count ones that are used as mass nouns are "massified". However, this may confuse syntax and semantics, by presupposing that words which denote substances are mass nouns by default. According to many accounts, nouns do not have a lexical specification for mass-count status, and instead are specified as such only when used in a sentence. Nouns differ in the extent to which they can be used flexibly, depending largely on their meanings and the context of use. For example, the count noun "house" is difficult to use as mass (though clearly possible), and the mass noun "cutlery" is most frequently used as mass, despite the fact that it denotes objects, and has count equivalents in other languages:

7.1.4. Grammatical meaning associated with the verb

Tense, aspect and mood are associated with the verb. Tense–aspect–mood, commonly abbreviated TAM and also called tense–modality–aspect or TMA, is the grammatical system of a language that covers the expression of tense (location in time), aspect (fabric of time – a single block of time, continuous flow of time, or repetitive occurrence), and mood or modality (degree of necessity, obligation, probability, ability). In some languages, evidentiality (whether evidence exists for the statement, and if so what kind) and mirativity may also be included.

The term is convenient because it is often difficult to untangle these features of a language. Often any two of tense, aspect, and mood (or all three) may be conveyed by a single grammatical construction, but this system may not be complete in that not all possible combinations may have an available construction. In other cases there may not be clearly delineated categories of tense and mood, or aspect and mood.
For instance, many Indo-European languages do not clearly distinguish tense from aspect. In some languages, such as Spanish and Modern Greek, the imperfective aspect is fused with the past tense in a form traditionally called the imperfect. Other languages with distinct past imperfectives include Latin and Persian.

In the traditional grammatical description of some languages, including English, many Romance languages, and Greek and Latin, "tense" or the equivalent term in that language refers to a set of inflected or periphrastic verb forms that express a combination of tense, aspect, and mood. In Spanish, the simple conditional (Spanish: condicional simple) is classified as one of the simple tenses (Spanish: tiempos simples), but is named for the mood (conditional) that it expresses. In Ancient Greek, the perfect tense (Ancient Greek: χρόνος παρακείμενος khrónos parakeímenos) is a set of forms that express both present tense and perfect aspect (finite forms), or simply perfect aspect (non-finite forms).

Not all languages conflate tense, aspect, and mood, however; close to a theoretically ideal distinction, with separate grammatical markers for tense, aspect, and/or mood, is made in some analytic languages such as creole languages.

7.1.4.1. Tense

Tense is a term that refers to the way verbs change their form in order to indicate at which time a situation occurs or an event takes place. For finite verb phrases, English has just one inflectional form to express time, namely the past tense marker (-ed for regular verbs). Therefore, in English there is just a contrast between present and past tense. Needless to say, non-finite verb phrases (to-infinitives and –ing forms)

are not marked for tense. When occurring with modals, verb phrases are used in their base form, with no tense marker. Each tense can have a simple form as well as be combined with either the progressive or perfective aspect, or with both of them:

(a) I work; I'm working; I have worked; I have been working (present)
(b) I worked; I was working; I had worked; I had been working (past)

Sentences can also be used in the passive voice (note that the perfect-progressive is not normally found in the passive):

(a) I am told; I'm being told; I have been told
(b) I was told; I was being told; I had been told

Time and tense are not overlapping concepts. Though tense is related to time , there is no one-to-one correspondence between the two. Tense is a grammatical category: rather than with "reality", it has to do with how events are placed, seen, and referred to along the past-present-future time line. Thus, a present tense does not always refer to present time, or a past tense to past time. Actually, the present and past tenses can refer to all three segments of the time line (past, present, and future). For example, the present tense may be used to speak about a future event (often, but not necessarily, accompanied by a future time adverbial), while the so-called "historic present"– frequently used to convey dramatic immediacy – refers to the past as if it were happening now:

The World Cup starts next week

Hear what happened to me the other day. The boss comes in my office and says: 'You're fired!'...

By the same token, a past tense can refer to present time. This occurs, for instance, in hypothetical sentences, in reported speech, as well as in other structures:

If I had more money, I would buy a new car
Did you tell him you were/are busy?
It's time you changed your car

Furthermore, the past tense can express tentativeness, often associated with politeness:

Did you want to make a phone call?

Were you looking for me?

Semantically, the grammatical features of tense serves essentially to locate the event referred to in the sentence with reference to the time at which the utterance was produced (Cruse, 2000:274). Only languages which encode timing distinctions by means of grammatical elements (usually inflectional morphemes or grammatical markers such as auxiliary verbs) can be properly said to manifest the grammatical feature of tense. Many languages encode the timing of a designated event lexically, by means of expressions equivalent to yesterday, last year, next week, etc. (Cruse 2000: 274).

A distinction is usually made between primary (or absolute) tenses, which encode event time directly relative to the time of speaking, and secondary (or relative) tenses, which encode event time relative to a secondary reference time which, in turn, is located relative to speaking time, thus making the relation between event time and speaking time an indirect one (Cruse 2000: 274).

The tense system of most of the languages are said to be vectorial, that is, they essentially indicate the direction along the time-line from speaking time to event time. Some languages also grammatically encode degrees of remoteness, equivalent to contrasts such as the following (Cruse 2000: 274)

(a) I used to go for an run every morning, once (distance past)

(b) I went for a run (past)

(c) I've just been for a run (recent past)

The alternative to a vectorial system is a material system of tense, based on definite intervals of time. The most frequent is hodiernal system, which distinguishes "today" and "not today". Up to six of seven intervals may be distinguished, with, as in most tense system, the past being more highly differentiated than the future. According to Comrie (1985; 99) Yagua makes the following distinctions in its grammatical tense system (Cruse, 2000:274): past (today), yesterday, within a few weeks ago, within a few months ago and distant past.

There are three basic primary tenses, past (event occurs before time of speaking); present (even occurs concurrently with speaking time, or includes it); and future (event projected to occur after the time of speaking) (Cruse 2000: 274):

(a) Raja saw Radha
(b) Raja sees Radha
(c) Raja will see Radha

In the case of secondary tense, there are nine possibilities. Presumably all languages can express all nine secondary tense relationships one way or another, no language with an inflectional tense system has distinct inflections for all time (Cruse 2000: 274)..

7.1.4.2. Aspect

Aspect is a grammatical category that reflects the perspective from which an action/situation is seen: as complete, in progress, having duration, beginning, ending, or being repeated. English has two aspects, progressive (also called continuous) and perfect(ive). Verbs that are not marked for aspect (the majority of them are not) are said to have simple aspect.

In British English, the perfective aspect is much more common than in American English, since Americans often use the past simple where Britons use the present perfect. Verb phrases can be marked for both aspects at the same time (the perfect progressive, however, is infrequent). The following combinations are possible: present progressive; past progressive; present perfective; past perfective; present perfective progressive; past perfective progressive:

(a) He's sleeping; He was sleeping
(b) He has slept; He had slept
(c) He has been sleeping; He had been sleeping

Usually, grammars contrast the progressive with the perfective aspect (and the simple, for that matter) on the basis that the former refers to an action/event as in progress, while the latter tends to indicate the completeness of an action, to see actions and events as a whole and a situation as permanent. This is certainly a useful distinction, which will not be questioned here; yet students must be aware that the above is an oversimplified view, as is demonstrated by the fact that the two aspects can combine within a single verb phrase.

It is important to distinguish aspect clearly from tense. Tense serves to locate an event in time; aspect says nothing about when an event occurred (expected by implication), but either encodes a particular way of

conceptualizing an event, or conveys information about the way the event unrolls through time. It is also important to make a distinction between aspect as a semantic phenomenon, and aspect markers in a particular language, which may have a variety of semantic functions. To make things even more complicated, a lexical verb may encode aspectual information as part of lexical meaning; this may affect the way the meaning of the verb interacts with the meanings of aspectual markers with which it is associated.

7.1.4.2.1. Progressive aspect

The progressive aspect, either in the present or past tense, generally refers to an action/event (usually of limited duration) in progress at a particular time, to an uncompleted activity, to a temporary state of affairs or a temporary habit. The present progressive is formed by the present tense of the verb be + the -ing form of the lexical verb, the past progressive by was/were + the -ing form of the lexical verb: Can you answer the door? I'm shaving Look, it's snowing! I'm going to bed very late these days We're studying German this year I was sleeping when I hear a strange noise I was living in Buenos Aires at the time.

The activity may also not be, strictly speaking, continuous, that is to say it may refer to a series of individual acts:

> Some of the demonstrators are smashing shop windows

Needless to say, the progressive aspect does not reflect the length of an action, but the speaker's view of a certain event. Though aspect and the duration of an action are somehow related – in fact, to describe an event lasting only a short time the simple aspect is more frequently used – the simple aspect is not reserved for short actions nor is the progressive used exclusively to talk about events lasting for a (fairly) long time.

As we have seen above, the progressive aspect can combine with the perfective aspect, both present and past, as well as with a modal or a modal and a perfective together. Finally, the infinitive can also be used in the progressive:

> I've been toiling for hours You must be kidding He must have been joking It's too early to be sleeping

Normally, only so-called dynamic verbs are used in the progressive, while stative verbs are found in the simple aspect. Yet, there is no one-to-one relationship between dynamic verbs and progressive aspect or between stative verbs and simple aspect: as we shall see later on, stative verbs can sometimes occur in the progressive – when, for instance, they refer to a situation which extends over time but is not permanent – while some dynamic verbs – those referring to actions taking a very short time – usually occur in the simple form. Indeed, the difference between stative and dynamic verbs is not so clear-cut as is often thought to be, and thus deserves to be examined in some detail. Such difference is better conceived in terms of a continuum, and it would be more correct to talk about the stative or dynamic senses in which a verb is used, though the traditional distinction between stative and dynamic verbs is undoubtedly convenient (provided it is not applied in a simplistic way).

Stative verbs are verbs of "being". Since they refer to "states", they are normally used with the simple aspect. On the contrary, dynamic verbs are verbs of "doing", they refer to activities, events and processes. They can occur in both the simple and the progressive aspects, depending on the meaning speakers wish to convey. The first of the following sentences refers to a habitual, repeated action, the latter to an action in progress at the time of speaking:

I work on Saturday morning I'm working now

In general, two elements determine if a verb is frequently or rarely found in the progressive aspect: the length of the action described by the verb and the status of the subject as either agent or experiencer. The progressive form is common in clauses that have a human agent as subject and refer to an action, event, state or situation which last for a substantial period of time; contrariwise, verbs that are rarely used in the progressive form describe temporary states of short duration or actions that take place very quickly.
Stative verbs indicate possession and describe thoughts, beliefs, feelings, wishes, preferences, perceptions of the senses, as well as states of being. Verbs that typically occur with stative senses are: \

(1) verbs of perception, such as: appear, feel, hear, see, seem, smell, sound and taste; (2) verbs that refers to mental, emotional and cognitive states, such as: adore, assume, believe, care, consider, desire, detest, dislike, doubt, envy, expect, fear, find (meaning "consider"), forget, forgive, guess, hate, hear (meaning "to be told"), hope, imagine, intend, know, like, love, mean, mind, notice, prefer, realize, recall, recognize, refuse, regard, regret, remember, see (meaning "understand"), want, wish, wonder; (3) verbs that contain the idea of "being" and "having", that refer to situations which cannot easily be imagined as

having a time limitation: be, have (meaning "possess"), belong, compare (meaning "be similar to"), concern, consist, contain, cost, depend, deserve, differ, equal, exist, fit, hold, include, interest, involve, lack, matter, measure, need, owe, own, possess, remain, require, resemble, suit.

Some examples of verbs normally used in stative senses:

(a) It just seems strange to me I detest football.
(b) The police intend to prosecute him.
(c) Of course I recall our first meeting!
(d) The whole estate belongs to him I'm afraid this will involve plenty of paperwork.
(e) It surely matters how you spend our money! I owe you a favour.
(f) We think we deserve some reward for our work My opinion on the issue of genetically-modified food does not differ from yours

The progressive aspect is unacceptable with stative verbs describing qualities – i.e. (relatively) permanent and inalienable characteristics/properties of the subject referent – as different from states, which refer to less permanent situations and thus can occur in the progressive:

They own a beautiful country house / *They are owing a beautiful country house She has wonderful eyes / *She's having wonderful eyes

Most stative verbs are not incompatible with the progressive aspect, though. When used in the progressive form, these verbs are reclassified, and a change of interpretation takes place. They may refer to an action/situation or behaviour that has limited duration:

He is not an honest man; I'm sure he's not being honest with you.
I love music; I'm loving the music tonight.
That car costs quite a lot; This night out is costing me a fortune:

Stative verbs can also take the progressive form when the idea of an uncompleted physical or mental state is emphasized. Furthermore, verbs expressing attitudes or emotions may convey tentativeness if used in the progressive (often the past progressive):

I'm hoping they will reconsider their decision I'm forgetting all I have learnt at school I was wondering if I did the right thing

Verbs referring to sensory perceptions are usually preceded by can/could. However, they can also be used in the progressive, when emphasis is put on the process of perception:

I can hear you I could feel the difference There's no need to shout. I'm hearing you! I'm not seeing well with these new glasses

The deliberate acts corresponding to the involuntary sensory reactions indicated by hear and see are expressed through the verbs listen and look. On the contrary, feel, smell and taste refer to both voluntary action and involuntary perception. Needless to say, verbs referring to voluntary actions can be found in the continuous form:

I (can) hear what they say;
I'm listening to what they are saying
I (can) see her;
I'm looking at her
I felt / could feel a hand touching my shoulder;
I'm feeling the quality of the leather I (can) smell gas;
She's smelling the flowers
I (can) taste cinnamon in the cake;
He's tasting the custard

When they refer to a temporary condition, verbs describing bodily sensation can be used in both the simple and progressive form with hardly any difference in meaning:

My knee aches badly;
My knee is aching badly I feel tired;
I'm feeling tired

As we have already stated, dynamic verbs indicate activities, they do not describe events as a whole. They can occur in both the progressive and non-progressive form. They include verbs indicating a temporary situation or an activity having some duration (for example *cook, jog, live, read, study, work*):

I was living in New York at that time I'm making a cake

Some dynamic verbs are punctual, i.e. they refer to events that have very little duration, and thus they generally occur in the simple aspect. Examples of punctual verbs are break, close, hit, jump, knock, nod, and tap. When used in the progressive, they often indicate the repetition of an action:

They were jumping in with excitement someone's knocking at the door.

A punctual verb can also be used in the progressive aspect for emphasis. This could be the case, for instance, when speakers see events in slow-motion, or when they want to focus on something which happened while something else was going on, even though this latter is an action taking only a little time to be completed:

Here Beckam is committing a nasty foul The bullet struck him while he was closing the window

Two more examples: They were hitting the man with a baton; He's opening the door of the hotel. The first sentence refers to the repetition of a momentary act, to a series of blows delivered to the man; the second would make sense, once again, if interpreted as a series of acts (the person performing the action is a hotel doorman), or if reference is purposely made to the few seconds an act such as opening a door takes to be completed. In a radio or television commentary about an important political meeting, for example, it would not sound strange even to dwell upon the opening of the door of a Prime Minister's residence.

Verbs indicating a change of state or position, such as: arrive, become, die, drown, grow, land, leave, stop, turn, can be used in the progressive aspect. When this is the case they refer to the period of time leading up to the change of state (which need not take place):

Do something! They're drowning I'm growing old The plane is landing I'm leaving

A few verbs can be used either in the simple or the continuous form with no significant difference of meaning:

You look great / you are looking great I feel depressed / I'm feeling depressed

Other verbs can be used in both aspects, but with a difference in meaning. Consider the following examples:

I think you're wrong (= believe);
I'm thinking about what you said (= reflecting on)
She comes from France (= lives in);
She's coming from France (= travelling)
I see what you mean (= understand);
I'm seeing her quite often (= meet)
This room looks really nice (= the verb refers to the appearance of the room);
He's looking at you (= he has directed his eyes in your direction)
Your suitcase weighs too much (the verb refers to the weight of the suitcase);
People at the check-in desk are weighing his suitcase (= they are measuring how heavy the suitcase is)
The rules apply to everyone (= concern);
We are applying for a trading license (= make an application for)
I consider him to be the best in his field (= think);
They are considering my application (= look carefully at)
Would you mind if I borrowed your bike? (= object);
Our friends are minding the bags (= take care of)

7.1.4.2.2. Perfective aspect

The perfective aspect is used to refer to a state or action which has taken place before the time of speaking, as well as to a state or action (or series of actions) occurring in a period of time we imagine as continuing until the present or until a certain moment in the past (until now or until then), or that has just ended. Remember: the events and situations referred to by the perfective aspect have some relevance to the time of speaking (the present in the case of the present perfective, the past in the case of the past perfective, the future in the case of the future perfective). The perfective aspect is also used to indicate the completeness of an action, to see events as a whole:

I have tidied my room
I've often spent my holidays in South America

She had just found a solution to the problem

The present perfective is formed by have/has + past participle, the past perfective (statistically less common than the present) by had + past participle, while the future perfective by will have + past participle:

I have had the same car for twelve years! It's time to get a new one
I had lived in Paris for two years when I decided to come back home We will have been together for ten years next month

The perfective aspect can combine with the progressive aspect, with a modal or with a modal and a progressive together (examples of the first and third combination are also provided above); perfect infinitives are also to be found:

I've been running He had been watching TV all day You should have done this more carefully
He must have been kidding They seem to have liked the film

Note that the perfect progressive aspect indicates the possible incompleteness of an action. In the following examples, it is not clear whether the action has been completed or not:

I've been repairing my bike (I may or may not have finished repairing the bike)
They have been cleaning their room for hours (they may or may not have finished cleaning)

7.1.4.2.3. Perfective vs. imperfective

One of the most widespread aspectual distinction is that between imperfective and perfective. In many languages there is a formal distinction of some sort whose prototypical semantic function is to signal the perfective/imperative contrast (e.g. Czech and Arabic). In English there is no regular way of indicating the distinction, but it is often associated with the progressive/simple alternation and can be observed in the following examples:

I saw the chicken cross the road. (perfective)
I saw the chicken crossing the road (imperfective)

7.1.4.2.4. Perfect vs. prospective

The English perfect is a typical example. Consider the difference between the following:

> Raja read the book.
> Raja has read the book.

Both indicate that Raja's reading of the book occurred in the past. But the first sentence directs our attention into the past, to the specific time when the event occurred; the second sentence, on the other hand, directs our attention towards Raja's present state, or at least at aspects of it which are attributable to his having read the book at some (intermediate) time in the past. This is the essence of the perfect: present relevance of the past events.

Some linguists distinguish a counterpart to the perfect, but involving the future, called the prospective. A gloss of this would be: the present relevance of a future event. Consider the difference between the following:

> Raja will leave tomorrow.
> Raja is leaving/is going to leave tomorrow.

One explanation is that the first sentence can be a pure prediction, and can apply to an event which is not under the control either of Raja or of the speaker. The second sentence, on the other hand, implies that the event is under the control of one or the other, and the decision and arrangements are currently complete. in other words, things are currently in a state such that, if all goes according to plan, Raja will leave tomorrow.

7.1.4.3. Voice

In grammar, the voice (also called diathesis and (rarely) gender (of verbs)) of a verb describes the relationship between the action (or state) that the verb expresses and the participants identified by its arguments (subject, object, etc.). When the subject is the agent or doer of the action, the verb is in the active voice. When the subject is the patient, target or undergoer of the action, the verb is said to be in the passive voice.

For example, in the following first sentence the verb "ate" is in the active voice. However, in the second sentence the verbal phrase "was eaten" is passive.

The cat ate the mouse.

The mouse was eaten by the cat.

In following example, in the first sentence the verb "killed" is in the active voice, and the doer of the action is the "hunter". A passive version of the sentence is where the verbal phrase "was killed" is followed by the word "by" and then by the doer "hunter".

The hunter killed the bear.

The bear was killed by the hunter.

In a transformation from an active-voice clause to an equivalent passive-voice construction, the subject and the direct object switch grammatical roles. The direct object gets promoted to subject, and the subject demoted to an (optional) complement. In the examples above, the mouse serves as the direct object in the active-voice version, but becomes the subject in the passive version. The subject of the active-voice version, the cat, becomes part of a prepositional phrase in the passive version of the sentence, and can be left out entirely.

The active voice is the most commonly used in many languages and represents the "normal" case, in which the subject of the verb is the agent. In the active voice the subject of the sentence performs the action or causes the happening denoted by the verb. Examples of active voice include the following; John ate the potatoes. The verb ate indicates the active voice. But consider the following sentence which is in passive voice: The potatoes were eaten by John. The verb were eaten indicates the presence of passive voice. therefore for the case of active voice it shows that someone has done something or has caused something to happen. But for the case of passive voice it shows that something has been done by some else. The passive voice is employed in a clause whose subject expresses the theme or patient of the verb. That is, it undergoes an action or has its state changed. In the passive voice the grammatical subject of the verb is the recipient (not the doer) of the action denoted by the verb.

Some languages, such as English and Spanish, use a periphrastic passive voice; that is, it is not a single word form, but rather a construction making use of other word forms. Specifically, it is made up of a form of the auxiliary verb to be and a past participle of the main verb. In other languages, such as Latin, the

passive voice is simply marked on the verb by inflection: *librum legit* "He reads the book"; *liber legitur* "The book is read".

Some languages (such as Albanian, Bengali, Fula, Tamil, Sanskrit, Icelandic, Swedish, Biblical Hebrew and Ancient Greek) have a middle voice, which is a set of inflections or constructions which is to some extent different from both the active and passive voices. The middle voice is said to be in the middle between the active and the passive voices because the subject often cannot be categorized as either agent or patient but may have elements of both. For example, it may express what would be an intransitive verb in English. In The casserole cooked in the oven, cooked is syntactically active but semantically passive. In Classical Greek, the middle voice often has a reflexive sense: the subject acts on or for itself, such as "The boy washes himself", or "The boy washes". It can be transitive or intransitive. It can occasionally be used in a causative sense, such as "The father causes his son to be set free", or "The father ransoms his son".

In English there is no verb form for the middle voice, though some uses may be classified as middle voice, often resolved via a reflexive pronoun, as in "Fred shaved", which may be expanded to "Fred shaved himself" – contrast with active "Fred shaved John" or passive "John was shaved by Fred". This need not be reflexive, as in "my clothes soaked in detergent overnight". English used to have a distinct form, called the passival, which was displaced over the early 19th century by the passive progressive (progressive passive), and is no longer used in English. In the passival, one would say "the house is building", which is today instead "the house is being built"; likewise "the meal is eating", which is now "the meal is being eaten". Note that the similar "Fred is shaving" and "the clothes are soaking" remain grammatical. It is suggested that the progressive passive was popularized by the Romantic poets, and is connected with Bristol usage. Many deponent verbs in Latin are survivals of the Proto-Indo-European middle voice

7.1.4.4. Functional roles

Consider the sentence John opened the door. There are two main participants in the event. John and the door. These, however, have different relationships to the act of opening. John is the doer, the agent and supplies the force needed to open the door; the door is passive, is affected by the action, and undergoes the designated change of state. These relationships are variously called functional roles, case roles, deep cases, participant roles, thematic roles (Cruse, 2000: 281). In linguistics, grammatical relations (also called grammatical functions, grammatical roles, or syntactic functions) refer to functional relationships

between constituents in a clause. The standard examples of grammatical functions from traditional grammar are subject, direct object, and indirect object.

It may not be enough to limit our knowledge of words to their basic characteristics. It is necessary to examine the functions of lexical items in a systematic way. This can be achieved by focusing on the role relations of lexical items. Indeed, role relations provide information on semantic relationships among lexical items. In doing so, role relationships help to highlight functions of lexical items. The functions of lexical items are referred to as arguments as we have in these examples:

agent, instrument, experience, source, goal, path, location, possessor, patient, etc.

Nouns and noun phrases are described as arguments in relation to the verbs in the sentence. Verbs are central in determining semantic roles. These roles relate to processes, events and state of affairs associated with participants in the sentence.

The agent is usually a noun phrase marked as [+ANIMATE], and which instigate an action or an event as shown below.

(i) *John* boiled eggs (John as agent)

When entities designated as [-ANIMATE] initiate some action, we describe the entities as *force*. For example:

(ii) *Radiation* caused some damage (Radiation as force)

That entity that is affected by the action of the *agent* or *force* is referred to as *patient.* For instance:
(iii) John boiled *eggs* (eggs as patient)

The entity that undergoes some psychological state is the experience

(iv) *Juliet* became happy (Juliet as experiencer)

The instrument is the semantic role for what is used to carry out a piece of action.

(v) She cleaned the chair with *a brush* (brush as instrument)

Source indicates the origin or direction from which an entity comes. The source is usually a location.

(vi) The teacher took out the duster from *the cupboard.* (the cupboard as source)

We can, however refer to the place an entity is situated. That is usually the location as a thematic role. The semantic role *goal* shows the direction towards which an entity goes. (vii) The mango rolled *into a basket*.

The path shows the route along which an entity moves. For example:

(viii) They reached the town *through the unused road*.

We also have the possessor or the beneficiary, describing the entity benefiting from an action. The beneficiary is always [+ANIMATE].

7.1.5. Adjectives and properties

Not all languages have adjectives, but in those languages which have them, adjectives protypically denote atemporal properties, that is to say, properties which are relatively stable over time, or which are construed in such a way that no account needs to be taken of the passage of time. Adjectival properties are also prototypically unidimensional, denoting an easily isolable concept, in contrast to protypical nouns which denote rich, highly interconnected complexes of properties.

Noun modification is primarily associated with the syntactic category "adjective." Adjectives have their sole function the modification of nouns, whereas modification is not the primary function of noun, verb, and prepositional phrases. The lexical organization of adjectives is unique to them, and differs from that of the other major syntactic categories, noun and verb. WordNet contains:

Descriptive adjectives (Ex. big, heavy)
Relational adjectives (Ex. economic', fraternal)
Reference modifying adjectives (Ex. old, former)

7.1.5.1. Descriptive adjectives

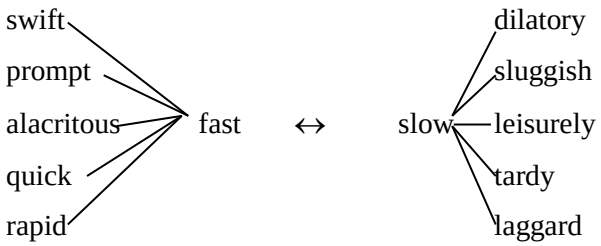
A descriptive adjective is one that ascribes a value of an attribute to a noun. For example, 'that luggage is heavy' presupposes that there is attribute 'WEIGHT' such that weight ('luggage') = 'heavy'. In the same way 'low' and 'high' are values of HEIGHT. The word net has to link the descriptive adjectives with the appropriate attributes. The descriptive adjectives require a semantic organization which differs drastically form that of nouns. The hyponymic relation that builds nominal hierarchies is not available for adjectives. It is not possible to say that one adjective 'is a kind of' some other adjective. Relating descriptive adjectives with the particular noun they pertain to is known by the term pertainymy.

7.1.5.2. Antonymy in adjectives

Antonymy is the basic semantic relation that exists among descriptive adjectives. The word association testes reveal the importance of antonymy in adjectives. As the function of descriptive adjectives is to express values of attributes, and that nearly all attributes are bipolar, antonymy becomes important in the organization of descriptive adjectives. Antonymous adjectives express opposing values of an attribute. For example, the antonym of 'heavy' is 'light' that expresses a value at the opposite pole of the WEIGHT attribute. Antonymy, like synonymy, is a semantic relation between word forms. The problem is that the antonymy relation between word forms is not the same as the conceptual opposition between word meanings.

7.1.5.3. Similarity in adjective

The adjectives lacking antonyms are similar in meaning to adjectives that do have antonyms.



Overwhelmingly, association data and co-occurrence data indicate that *big* and *little* are considered as a pair and *large* and *small* are considered as a pair. These pairs demonstrate that antonymy is a semantic relation between words rather than concepts.

7.1.5. 4. Gradation in adjectives

Most discussions on antonymy distinguish between contradictory and contrary terms. This terminology is originated in logic, where two propositions are said to be contradictory if the truth of one implies the falsity of the other and are said to be contrary if only one proposition can be true but both can be false.

‘alive’ – ‘dead’ (Contradictory terms)
‘fat’ –‘thin’ (Contrary terms)

Contraries are gradable adjectives, contradictories are not. Gradation, therefore must also be considered as a semantic relation organizing lexical memory for adjectives.

warmth: very hot, hot, warm, cold
age: old, middle aged, young

7.1.5.5. Gradable and non-gradable adjectives

There are two major dichotomies in the classification of adjectives. The first separates gradable from non-gradable adjectives. This has grammatical consequences, because prototypically, the degree inflections occur only in connection with gradable adjectives; if an adjective is basically non-gradable, then it has to be reinterpreted when inflected for degree:

Raja was very married
Radha is very alive.

7.1.5.6. Markedness in adjectives

Binary oppositions frequently have a marked term and an unmarked term. That is, the terms are not entirely of equivalent weights, but one (the unmarked one) is neutral or positive in contrast to the other. Marked/unmarked distinction is found in polar oppositions such as : 'high’: ‘low, 'old': 'young', 'long': 'short, wide: narrow.

We measure things by ‘height’ rather than ‘shortness’. While asking questions about ‘height’, we say ‘How high that pillar is?’ rather than ‘How short that pillar is?’. A question ‘How short is X?’ is felt to contain the assumption that X is short, while no equivalent assumption is present in ‘How high is X?’

That is, if the two antonyms contrast with reference to a scale of measurement, the unmarked one is capable of referring to a point on that scale, thereby neutralizing the contrast. Thus the primary member, 'high' is the unmarked term; the secondary member, 'short' is the marked one. They are related to the attribute noun 'height' Word net has to capture the relation between marked and unmarked terms and their cross reference to their variable property.

7.1.5.7. Polysemy and selectional preferences

Polysemy is found among adjectives as a limited number of adjectives are used to attribute a considerable number of nouns. For example, the use of *good* in the following phrases illustrates the polysemous nature of it. The semantic interpretation of adjectives depends on the head noun they modify. Many adjectives take on different meanings when they modify different nouns. The following example will exemplify this statement.

good time, good coin, good friend, good shoes

Adjectives are choosy about the nouns they modify. The general rule is that if the referent denoted a noun does not have attribute whose value is expressed by the adjective, then the adjective-noun combination requires a figurative or idiomatic interpretation. For example, a road can be long because roads have LENGTH as an attribute, but stories do not have LENGTH, so 'long' does not admit literal readings. The selectional preferences of adjectives should be captured in such instances.

7.1.5.8. Reference-modifying and referent-modifying adjectives

Distinction has to be drawn between reference modifying and referent-modifying adjectives. For example *old* in the phrase *my old friend* does not refer the referent who is a person as *old*, but attributes the friendship as *old*, whereas *old vessel* attributes directly the *vessel* itself. Similarly, in the following phrase, both the adjectives attribute the quality of being criminals and the quality of being ministers respectively, rather than the persons.

Yesterday's criminals are today's ministers

Some reference modifying adjectives may have direct antonyms as in the case of descriptive adjectives.

’past’ vs. ‘present’
'past’ vs. ‘present’.

7.1.5.9. Colour adjectives

Colour terms need to be addressed differently than other adjectives. They can be both nominal as well as adjectival. As adjectives they can be graded and conjoined with other descriptive adjectives. But they differ form the descriptive adjectives as the pattern of direct and indirect anotonymy does not hold good for colour adjectives. Only one color attribute is clearly described by direct antonyms: LIGHTNESS, whose polar values are expressed by light: drark

7.1.5.10. Relational adjectives

Relational adjectives include of a large and open class of adjectives. Relational adjectives can be defined by using the phrase ‘of, relating/pertaining to or associated with some noun', and they play a role similar to that of a modifying noun. For example, ‘fraternal’, as in ‘fraternal love’ relates to ‘brother/sister’, and ‘economical’, as in ‘economical difference’, is related to. As for as Tamil is concerned noun form is used mostly in the place of relational adjective in English. For example, ‘musical instrument’, ‘dental hygiene’

Since relational adjectives do not have antonyms, they cannot be incorporated into the clusters that characterize descriptive adjectives. And because their syntactic and semantic properties are a mixture of those of adjectives and those of nouns used as noun modifiers, rather than attempting to integrate them into either structure Tamil word net will maintain a separate file of relational adjectives with cross references to the corresponding nouns.

7.1.5.11. Modification

The principal function of adjectives is modification: the combination of Adj + Noun prototypically restricts the domain designated by the noun alone to a subpart, and designates a subset of entities denoted by the noun alone. There are two main positions for adjectives in English:

a **long** book - attributive position
the book is **long** - predicative position

7.1.6. Quantification

Quantification is concerned with expressions like the following:

> No Tamils came to the party.
> Some of my best friends are vegetarians.
> All students can sing national anthem

The subject noun phrases in the above are quantified noun phrases; the sentence express quantification. A quantification requires a quantifier (e.g. no, some, many, all, etc.), restriction (which indicates the sort of things being quantified, e.g. Tamils) and scope, which expresses what is true of the items designated by quantified noun phrase.

In linguistics and grammar, a quantifier is a type of determiner, such as all, some, many, few, a lot, and no, (but not numerals) that indicates quantity. Quantification is also used in logic, where it is a formula constructor that produces new formulas from old ones. Natural languages' determiners have been argued to correspond to logical quantifiers at the semantic level.

All known human languages make use of quantification. For example, in English:

> Every glass in my recent order was chipped.
> Some of the people standing across the river have white armbands.
> Most of the people I talked to didn't have a clue who the candidates were.
> A lot of people are smart.

The words in italics are quantifiers. There exists no simple way of reformulating any one of these expressions as a conjunction or disjunction of sentences, each a simple predicate of an individual such as That wine glass was chipped. These examples also suggest that the construction of quantified expressions in natural language can be syntactically very complicated. Fortunately, for mathematical assertions, the quantification process is syntactically more straightforward.

The study of quantification in natural languages is much more difficult than the corresponding problem for formal languages. This comes in part from the fact that the grammatical structure of natural language sentences may conceal the logical structure. Moreover, mathematical conventions strictly specify the

range of validity for formal language quantifiers; for natural language, specifying the range of validity requires dealing with non-trivial semantic problems. For example the sentence "Someone gets mugged in New York every 10 minutes" does not identify whether it is the same person getting mugged every 10 minutes, see also below.

Montague grammar gives a novel formal semantics of natural languages. Its proponents argue that it provides a much more natural formal rendering of natural language than the traditional treatments of Frege, Russell and Quine.

7.1.6.1. Quantifiers in classical predicate logic

In logic, quantification is a construct that specifies the quantity of specimens in the domain of discourse that satisfy an open formula. For example, in arithmetic, it allows the expression of the statement that every natural number has a successor. A language element which generates a quantification (such as 'every') is called a quantifier. The resulting expression is a quantified expression, it is said to be quantified over the predicate (such as "the natural number x has a successor") whose free variable is bound by the quantifier. In formal languages, quantification is a formula constructor that produces new formulas from old ones. The semantics of the language specifies how the constructor is interpreted. Two fundamental kinds of quantification in predicate logic are universal quantification and existential quantification. The traditional symbol for the universal quantifier "all" is "∀", a rotated letter "A", and for the existential quantifier "exists" is "∃", a rotated letter "E". Quantification is used as well in natural languages; examples of quantifiers in English are for all, for some, many, few, a lot, and no; see Quantifier (linguistics) for details.

In linguistic semantics, a generalized quantifier is an expression that denotes a set of sets. This is the standard semantics assigned to quantified noun phrases. For example, the generalized quantifier every boy denotes the set of sets of which every boy is a member.

$$\{X|\ \{x|\ x \text{ is a boy}\} \subseteq X\}$$

This treatment of quantifiers has been essential in achieving a compositional semantics for sentences containing quantifiers.

LEARNING ACTIVITY 7.1.

(1) Differentiate between grammatical semantics and sentential semantics.
(2) Distinguish between lexical meaning and grammatical meaning.
(3) Describe the meaning of major grammatical categories.
(4) Discuss about the grammatical meaning associated with nouns and noun phrases.
(5) Explain the grammatical meaning associated with the verb
(6) Describe the adjectives and their properties.
(7) Describe quantification.

7.2. Sentential semantics

A sentence is a grammatical unit, that is, it is a string of words of a particular type, whose well-formedness conditions are specified in the grammar of the language. Thus, the following are the sentences of English:

The cat sat on the mat.
Raja put his hat on the table.

A sentence possesses meaning exclusively by virtue of the word it contain, and their grammatical arrangement. We may assume that the grammar of a language is associated with principles of composition, that is, rules which tell us how to put together the meanings of the constituents of construction to get the global meaning of the construction. Although a sentence, outside of particular uses, does not have a truth value, it does have truth conditions, that is, conditions which must hold for the sentence to be used to make a true statement. Those aspects of the meaning of a sentence is being used to make, in a particular situation, is true of false, are collectively known as the propositional content of the sentence.

7.2.1 Paraphrase

Paraphrase is to the sentence what synonymy is to words. This means that the paraphrase explains a situation in which two or more sentences have one meaning. Indeed, a sentence can have many paraphrases. There are two types of paraphrases: lexical and structural paraphrases. In lexical paraphrases, we have two or more sentences fiving the same interpretation as a result of the replacement of one word or phrase by another. The following are examples:

(i) The chef hired *a bachelor*
(ii) The chef hired *an unmarried man*

In the two sentences above, the change in their structure is as a result of the substitution of a bachelor for *an unmarried man*. Both *a bachelor* and *unmarried man* are phrases. Consider further the following sentences:

(iii) The man was *agitated*
(iv) The man was *anxious*

We have achieved the paraphrase by the substitution of the word *agitated* for another, *anxious.*Structural paraphrase is achieved when we alter the arrangements of the sentences through transformations. The following are examples:

(i) They bought a new apartment (Basic –subject + Verb+ object)
(ii) It was a new apartment that they bought (Cleft)
(iii) What they bought was a new apartment (Pseudo cleft)
(iv) A new apartment was what they bought (topicalised)

7.2.2. Ambiguity

When an expression can be given more than one interpretation ambiguity arises. Therefore, why polysemy relates to words, ambiguity is concerned with sentences. We have two types of ambiguity – lexical and structural.

Lexical ambiguity occurs when the presence of just a specific word leads to multiple interpretations. Consider the following examples:

(i) The team has many *goals*
(ii) She prepared *tables*

It should be noted that goals and tables can be interpreted in different easy based on the contexts.

Structural ambiguity is achieved by the organisation of the elements of the sentence. It is possible to interpret these elements in different ways. Consider these examples:

(i) They promoted all English teachers
(ii) boiling water can be dangerous

The ambiguity in the second sentence drives from the possibility of reading the sentence as:

(a) Water that is boiling (i.e. hot) can be dangerous
(b) The act of boiling water can be dangerous

The first interpretation makes *boiling water* as the subject noun phrase whereas in the second interpretations, *boiling water* is the complement.

7.2.3 Vagueness

A sentence is vague when it has no definite meaning. This lack of meaning may derive from the incompatibility of the semantic properties of some of the words. Sometimes, a vague expression may be grammatically well formed, yet its meaning may be farfetched. Consider the following classical example taken from Chomsky (1965).

(i) Colourless green ideas sleep furiously together

It should be noted that many of what we describe as literary language would have been vague except that we understand the background as literary. Consider further the following example:

(ii) The stones consoled her

This expression is clearly a personification since *stones* which are inanimate have been endued with the characteristics of *consoling.*

7.2.4 Tautology

A situation of tautology arises when we have unnecessary repetition of elements in communication. There is undue emphasis without necessarily making meaning any clearer. Tautology is closely associated with redundancy which is the introduction of linguistic units which do not affect the status or meaning of the larger construction. The following are examples of tautology.

(i) This bachelor has not been married
(ii) The congregation are members of a church

Other instances of tautology are: Circumnavigate *around;* Unlawful theft; *Can* be able.

7.2.5 Presupposition

In presupposition, there is usually a piece of information which the speaker assumes the hearer already knows. This assumption is based on some shared background knowledge between the speaker and the hearers. An outsider in the circle of communication may be at a loss. Let us illustrate this situation with the following sentences.

(i) John: Are you able to bring Harry along?
(ii) Peter: That will be splendid. On our way, we shall pick up the drinks.

The presupposition in this conversation is that both John and Peter know who Harry is. They both have an idea of the drinks, and the source from where to bring them.

7.2.6 Entailment

In entailment, there is usually a pair of sentences and the truth of one derives from the truth of other. Consider the following sentences:

(i) Tracy is a spinster
(ii) Tracy is a female

Sentence (i) derives from the meaning of sentence (ii). This means that if sentence (i) entails sentence (ii) then, sentence (ii) is necessarily the implication of sentence (i).

7.2.7 Anomaly

Anomaly results from the combination of two semantic features that are not compatible in describing a phenomenon. Words attract specific selectional restrictions. For instance *trees* are *vertical* while *rulers, ropes* and *snakes* are *horizontal.* For vertical items, we describe them in terms of *tall,* while for the horizontal ones we talk of *long.* Thus, we can have *tall trees, tall buildings tall people,* but *long ropes, long snakes, long rulers* etc. It will, therefore, be anomalous to have the following: *a long man, a tall snake,* etc,

7.2.8 Contradiction

Contradictory expressions present two opposing proposition at the same time. Thus, a person cannot be *dead* and *alive* at the same time. Other examples of anomaly are:

(i) That circular house is rectangular
(ii) The drains are flooded because there are no rains

7.2.9 Analyticity

We talk about analyticity when we have sentences in the grammatical forms and lexical meanings of their proposition which make them necessarily true. Consider the following examples:

(i) Churches are usually attended by Christians
(ii) Unmarried ladies are spinsters

LEARNING ACTIVITY 7.2.

(i) List the different areas of interest in the study of the meaning of the sentence.
(ii) Describe lexical and structural paraphrases.
(iii) Distinguish between ambiguity and vagueness.
(iv) Discuss the nature of presupposition and entailment.

SUMMARY

A great deal of the problems of communication derives from the misinterpretation of the grammatical and sentential meaning. It is always profitable to explore the full range of meaning from the point of view of grammar and sentence. This we have attempted in this unit. In this unit, we have studied semantics in its two dimensions: grammatical semantics and sentential semantics. Under grammatical semantics we studied about the difference and relation between lexical meaning and grammatical meaning, the meaning of major grammatical categories, grammatical meaning associated with nouns and noun phrases, grammatical meaning associated with the verbs, adjectives and their properties and quantification. Under sentential semantics we have focused our attention on paraphrase, ambiguity, vagueness, tautology, presupposition, entailment, anomaly, and analyticity.

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Unit 8

PRAGMATICS

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OVERVIEW

It will be most inconceivable to limit the study of semantics to the abstract study of meaning. Indeed, a dependable theory of meaning should explore language use. The relationship between semantics and language use is referred to as pragmatics. We shall explore this relationship in the course of this unit.

LEARNING OBJECTIVES

We should examine different aspects of pragmatics and speech acts in the sections that follow:
At the end of this unit, you shall be able to

(i) define pragmatics;
(ii) relate pragmatics to the meaning of sentences;
(iii) explain reference, referents, anaphora and deixis;
(iv) explain the theory of speech act;
(v) explain implicature

8.1. Pragmatics

Pragmatics is concerned with the range of choices and constraints available to users, and based on the context. In pragmatics, emphasis is on the pairing of sentences and their appropriate contexts. The choices made in language have been found to affect the listeners and their responses. It is possible to observe norms of politeness, appropriateness, formality and respect in the way language is used. It is believed that pragmatics determines the appropriate interpretation of sentences since there could be differences between literal and implied meanings. Differences in meaning are at the instance of the situation, the shared background and the linguistics context of the expression.

Pragmatics, according to Kempson (1986) is the study of the general principles necessary for retrieving information from a specific utterance based on the context. Emphasis is not necessarily on the grammatical or structural properties of the sentence. Indeed, a great deal of what we do in human communication is determined from the context. This means that the meaning of any stretch of communication is based on the interpretation of the listener. We also lay emphasis on the message, the participants, the deductions to be made from the utterance, the implications of what is said or assumed and the impact of the non-verbal aspects of the interaction on the meaning.

In terms of objectives, pragmatics deals with the totality of the processes through which utterances convey meaning hearing in mind the context and how participants respond to the meanings intended. It will therefore be easy to see that the common tie between *pragmatics* and *semantics* is *language.* However, while semantics is concerned with language *meaning*, pragmatics is concerned with language *use.* This will necessarily mean that the contextual approach to meaning will be very relevant to pragmatics. Since the full manifestation of language from the point of use deals on the implied processes, we shall explore the nature of *implicature.*

LEARNING ACTIVITY 8.1.

(1) Define pragmatics.

8.2. Reference, Anaphora, and Deixis

A lack of accurate understanding of the terminologies can cause terminological confusion among language teachers. In order to avoid the confusion, we presents and comprehensively discusses some central semantic notions such as reference, referent, referring expression, anaphora, and deixis. An accurate understanding of these notions can help language teachers, particularly semantics teachers, to enrich their insights into semantic terminologies.

8.2.1. Reference, Referring Expression, and Referent

Reference is commonly construed as an act in which a speaker, or writer, uses linguistic forms to enable a listener, or reader, to identify something. In other words, reference is concerned with designating entities in the world by linguistic means. Matthews (1997:312) states that "reference is the relation between a part of an utterance and an individual or set of individuals that it identified." It is important to note that

reference is often contrasted with the notion sense. While reference deals with the relationship between the linguistic elements (language) and the non-linguistics elements (the world), sense is exclusively concerned with the intra linguistic relations, particularly words (Palmer, 1981). Thus, the sense of *tulip*, for instance, relates to sense of other words such *flower* (known as hyponym), and the sense of profound relates to the sense of deep (known as synonym). The relation among words is also known as sense relation.

The linguistic forms or the linguistic means used to identify or designate entities are called referring expressions, which can be proper nouns (Edison, Bandung), noun phrases that are definite (the woman, the singer), or indefinite (a man, an island), and pronouns (he, her, it, them). Noun phrases, proper nouns are called primary referring expressions, while pronouns are termed secondary referring expressions (Kreidle,1998). In addition, Kreidler (1998:130) states that referring expression is "a piece of language that is used in an utterance and is linked to something outside language, some living or dead or imaginary entity or concept or group of entities or concepts."

When the sentence *Einstein is a famous scientist* is uttered to make a statement, we will say that the speaker refers to a certain individual (Einstein) by means of a referring expression. The thing or things (or the individual named Einstein in this case) in the world referred to by a particular expression is called its referent(s). Thus the notion referent is an expression for the thing picked out by uttering the expression in a particular context (Saeed, 1997:27). Sentences may also contain two or more referring expressions. For example, if the sentence Bill kissed Mary is uttered, with its characteristic force of making a statement, both *Bill* and *Mary* would be referring expressions, their referents being the individuals identifiable by names as *Bill* and *Mary*.

Kreidler (1998) further argues that the difference between referent and referring expression lies in the fact that there is no natural connection between referring expression and referent. There is no privileged one-to-one relationship between the expression *Bill Clinton* and the Bill Clinton, who was the president of the USA. Furthermore, theexistence of a referring expression does not guarantee the existence of a referent in thephysical-social world that we inhabit. We can create expressions with referents such as*the dragon in my house, the emperor of Indonesia* without necessarily proving theexistence of their physical referent.

8.2.1.1. Types of Referents

Kreidler (1998) provides a comprehensive account of different types of referentsused by a language to identify entities in the world. According to him, there areessentially three kinds of differences in referents. Each of these will be discussed below.

8.2.1.1.1. Unique and Non-Unique Referents

A referent has a unique entity or unique sets of entities if its referring expressionhas fixed reference. Thus entities like *the Rocky Mountains, the Louvre, the PacificOcean, Germany* designate unique entities that can be found only in certain places, andknowledge of it is part of one's general knowledge. On the other hand, a referent mayhave a non-unique entity if its referring expression has variable reference. Entities such as*that woman, my brother, a mountain,* are not unique since they are different every time they are used, and knowledge of it is a matter of specific knowledge. It is the physical andlinguistic contexts that help the speakers to identify those entities.

8.2.1.1.2. Concrete and Abstract Referents

Concrete referents are denoted by concrete or tangible objects such as *book,lamp, tree, brick,* whereas the abstract ones are designated by abstract or intangibleentities such as *beauty, democracy, knowledge, philosophy*. It is interesting to note thatlexemes with different kinds of denotation generally occur in different kinds of utterancesand may have different effects on other lexemes. Thus the lexeme *key* has a concretereferent in the phrase *the key to the front door*, bearing literal meaning, and an abstract one in *the key to success*, bearing figurative meaning.

8.2.1.1.3. Countable and Non-Countable Referents

It is the property of noun phrase that merits the notion countable and noncountable,both of which can be concrete and abstract. Concrete countable expressionsare those that are separate from one another, and those that can ordinarily be counted one by one. This includes such entities as *pencil, bags, chairs, and watches*. Abstract countable nouns include such entities as *problem, experience, and suggestion*. Concrete non-countable phrases have three kinds of reference: those that refer to continuoussubstances (*ketchup, sauce, milk, ink*), those that name substances consisting particles notworth counting (*rice, sand, sugar*), and those that refer to collections (*furniture, jewelry,luggage*).The feature that distinguishes countable noun phrases from non-countable ones isthat the former recognize the division between singular and plural forms while the latterdo not. Thus we can say *an apple, a hat, an umbrella*, the overt specifier

being presentpreceding the singular nouns, and *some apples, some hats, some umbrella, some apple sauce, some mud, some ink,* with a zero specifier preceding both plural countable andnon-countable.

In a language such as English the names of the animals that are countable bynature become uncountable when referring to food. An instance of this is the lexemes *(a)lamb, (a) chicken, and (a) turkey*. Finally, some nouns phrases may have dual classmembership in that it can be countable and noun-countable, depending upon the items itdesignates. Such entities as *(a) paper, (a) iron, (a) glass, (a) coffee*, etc. can be countableand non-countable.

8.2.1.2. Types of Reference

The discussion of reference has become a central concern in semantics, and the classification of different types of the ways of referring is relatively uncontroversial andremains undisputed among semanticists. Lyons (1977), Hofmann (1993), Kreidler (1998), and Cruse (2000) agree on the following classification of reference types:

8.2.1.2.1. Generic and Non-Generic Reference

The meaning of the notion *generic* (not really synonymous with general) can be understood by observing the following:

(1) The cat is a nice pet.
(2) A cat is a nice pet.
(3) Cats are nice pets.

Each of these sentences may be used to assert a generic proposition, that is a proposition which says something, not about this or that group of cat or about any particular individual cat, but about the class of cats as such. In other words, the entity *cat*in the above sentence is reference to a class of referents (Cruse, 2000:311). The fact that the *cat* in the sentences above has generic meaning can be demonstrated by proposing the question "which cat (s)?". Obviously none of the above sentences are the answer of such as question because the question is not germane. Sentence (1), (2), and (3) are in contrast with sentences (4) and (5) below.

(4) A cat is lying on the mattress

(5) Cats are lying on the mattress

In that the latter do not have generic reference. They do not necessarily refer to the whole class of cats. Although they are not the answers of the question "which cat (s)?" either, such a question is germane in this context. Lyons (1977) and Cruse (2000) identify two sorts of proposition involving generic reference as argument: either something is predicated of the whole class referred to, or something is predicated of each member of the class. The former has collective reference and the latter distributive reference. Sentence (1) has collective reference, and sentence (2) exemplifies distributive reference.

8.2.1.2.2. Definite and Indefinite reference

Kreidler (1998:143) argues that referring expression is definite if the referent from the physical-social context is identifiable for both speaker and hearer. The directive put the book on the table contains definite referring expression the book and the table.

Moreover, if the speaker assumes that the addressee can make the necessary implicature to relate a new reference to a previous one, this is also the case of referring expression. The utterance I bought a new house in a quite neighborhood. The kitchen is very big has a definite expression the kitchen. We can also say that a referent is definite is the referring expression is fixed and therefore presumably part of the addressee's general knowledge, like Mount Everest. Finally, referring expression is definite if the referent has a unique or nearly unique position in the more limited world of the speaker and addressee. For example, the definite referring expression of this type can be seen in the interrogative have you received the reports from the doctor?.

The central idea of the indefinite referring expression is that the identity of referent is not germane to the message, and that the hearer has to make a choice from the extension of the noun (Krediler, 1998; Cruse, 2000). It must be emphasized here that indefiniteness is not restricted to the indefinite article only. The following sentences also contain indefinite expressions (Cruse, 2000:308):

(6) Come up and see me sometime.
(7) I expect he's hiding somewhere.
(8) You'll manage somehow.
(9) Are you looking for something?

8.2.1.2.3. Specific and Non-Specific Reference

In order to identify whether a referent has a specific or non-specific reference, it is of importance to understand the discourse rather than the expression of the referent per sei. It is the discourse that determines the specificity or non- specificity of a reference. Consider now the following sentence:

(10) Every evening at six o'clock a heron flies over the chalet.

The indefinite noun phrase a heron in this sentence can, under one interpretation, be understood to refer to a specific referent. It refers to a particular heron that the speaker has in mind. We can further support the specificity of the reference by providing the same context as follow:

(11) It nests in the ground of the chateau.

The pronoun *It* in (11) is co-referential with *a heron* in (10). Again let us observe the sentence below:

(12) I trust we can find answers to all your questions.

The referent answer in (12) can be understood to refer to a non-specific reference since both speaker and hearer are not really sure about the referent being spoken. It should be admitted, however, that very often we cannot exactly tell whether an indefinite noun phrase is being used with specific reference or not as it is dependent very much upon how the speaker/hearer interprets it. Hence, due to the alleged ambiguity of the indefinite noun phrase in the sentence below, it can be construed as being used specifically or non-specifically:

(13) I want to marry a girl with blue eyes.

Under one interpretation, the indefinite noun phrase is used specifically if it implies the existence of some individual who satisfies the description of having blue eyes, and thus can be equated to having the same sense as the definite noun phrase the girl with the blue eyes in the same context. On the other hand, it is used non-specifically provided that no presupposition or implication exists.

8.2.2. Anaphora

Halliday and Hassan (1976), in a lengthy discussion of textual cohesion in English, classify reference into two types: exophora and endophora. When we utter *his shirt or your uncle*, we refer to some entity in the real world: real world reference is called exophoric reference. But we can also refer to the referents in the text items using linguistic means: reference in text is called endophoric reference.

Consider the following sentence:

(14) Danny doesn't like hamburger. He avoids eating it whenever possible

Danny and *hamburger* are two nouns with exophoric reference, while *he* and *it* have endophoric reference: they refer to *Danny* and *hamburger* in the context, and not directly to real-world entity. Traditionally they are called pronouns. Endophoric reference can be classified into anaphora and cataphora depending on the position of the antecedent. Observe the short passage below:

(15) In the film, a man and a woman were trying to wash a cat. The man was holding the cat

while the woman poured water on it. He said something to her and they started laughing.
The pronouns (*it, he, her*, and *they*) in the passage are subsequent reference to already mentioned referents, which are known as anaphoric reference or anaphora. Technically speaking, the subsequent reference is called anaphor and the initial or already introduced reference is known as antecedents. Quirk et. al. (1985) states that anaphoric reference is used where the uniqueness of reference of some phrase the X is supplied by information given earlier in the discourse. They further distinguish two kinds of anaphora: direct and indirect. In direct anaphora, the referents have already occurred in the text, and thus can be identified directly, whereas in indirect anaphora the hearer identifies the referents indirectly from his knowledge by inferring what has been mentioned. Consider the following sentences:

(16) John bought a TV and tape recorder, but he returned the tape recorder.
(17) John bought a car, but when he drove itone of the wheels came off.

Sentence (16) exemplifies the use of direct anaphora where the referent the tape recorder can be identified directly, while sentence (17) contains the indirect anaphora where the noun *car* has been substituted by anaphor *it*.

Similarly, Matthews (1997:18) defines anaphora as "the relation between a pronoun and another element, in the same or in an earlier sentence, that supplies its referents". Finally, Kreidler (1998) adds another type of anaphora, which he calls lexical anaphora. This anaphora is the restatement of a certain referring expression by means of repetition, synonym and superordinate as in (19):

(18) There was a strange painting on the wall.

(19) I wondered where { the painting / the picture / this work of art } had come from.

8.2.3. Cataphora

The notion cataphora is less common in use than that of anaphora. Cataphora is the relation between an anaphoric expression and an antecedent that comes later (Matthews 1997:48). Thus cataphora refers to entity that is mentioned latter in the discourse. Consider this sentence:

(20) I turned to the corner and almost stepped on it. There was a large snake in the middle of the path.

The pronoun *it* (the cataphor) in the sentence can be interpreted as referring forward to a noun phrase a large snake, (the antecedent) and is said to have cataphoric reference. Cataphora is also known as anticipatory anaphora or backward anaphora.

8.2.4. Deixis and its types

The notion deixis has become one of the important topics that merits our attention. Deixis is a semantics notion, which is originally derived from a Greek word meaning pointing or indicating via language. Any linguistic form used to accomplish this pointing is called a deictic expression. The adjective deictic (deikticos) has the sense of demonstrative. When we notice a strange object and ask, "What's that?" we are using a deictic expression (that) to indicate something in the immediate context. Deictic expressions are also sometimes called indexical. The notion of what deixis is relatively uncontroversial among the linguists. Lyons (1977:637) offers the following definition of deixis: "the location and identification of persons, objects, events, processes and activities being talked about, or referred to, in relation to the spatiotemporal context created and sustained by the act of utterance and the participation in it, typically of a single speaker and at least one addressee." Similarly, Yule (1996:9) argues that deixis is a form of

referring that is tied to the speaker's context, with the most basic distinction between deictic expressions being "near speaker" versus "away from the speaker." If the referents being referred to are near the speaker, the proximal terms such as *this*, *here*, *now* are used. By contrast, the distal terms such as *that*, *there*, *then* are employed provided that the referents are away from the speaker. Matthews (1997:89) states that deixis is "they way in which the reference of certain elements in a sentence is determined in relation to a specific speaker and addressee and a specific time and place of utterance." From the three definitions given above, it can be inferred that the notion deixis involves the pointing of certain referents that belong primarily to the category of persons (objects), speaker-addressee relationship, space, and time, context of utterance. Respectively, this category is termed person deixis, social deixis, spatial deixis, temporal deixis, and discourse deixis (Cruse 2000: 319). We shall examine each of these in detail.

8.2.4.1. Person Deixis

Person deixis basically operates on a three-part division, exemplified by the pronouns for first person or the speaker (I), second person or the addressee (you) and third persons or other participants (he, she, it). What is important to note here is that the third person singular forms encode gender, which is not deictic by nature because it is not sensitive to aspects of the speech situation (Cruse, 2000). Another point worth making with regard to the person deixis is the use of plural pronouns, which can be in the representative or true use (Cruse, 2000:320). If the pronoun *we* is spoken or written by a single speaker or writer to represent the group he or she refers to, it is the case of representative use. On the other, if it used to refer to the speaker and the group, the pronoun weis employed in its true sense. The representative and true use of pronoun *we* are also called inclusive and exclusive *we*, respectively. The inclusive-exclusive distinction is explicable in the utterance Let's go (to some friends) and Let us go (to someone who has captured the speaker and friends). The action of going is inclusive in the first, but exclusive in the second. The pronoun systems in English can be seen in the following (Cruse 2000: 319-320):

	Singular	Plural
1stperson		
	I/me	we/us
2nd person	you	you
3rd person	he/him, she/her, it	they/them

8.2.4.2. Social Deixis

In many languages the deictic categories of speaker, addressee, and other(s) are elaborated with markers or relative social status (addressee with higher status versus addressee with lower status). Expressions that indicate higher status are described as honorifics. A widely quoted example to describe the social deixis is the so-called TV distinction, from the French *tu* (referring to familiar addressee), and *vous* (referring to non-familiar addressee). Other languages that make a distinction between the social status are German with the distinguishing pronoun *du* and *Sie*, and Spanish with *tu* and Usted. In the social context the higher, older, and more powerful speaker will tend to use the *tu* version to a lower, younger, and less powerful addressee, and be addressed by the *vous* form in return.

8.2.4.3. Spatial Deixis

The concept of distance is relevant to spatial deixis, where the relative location of people and things is being indicated. As Cruse (2000:320) puts it "spatial deixis manifests itself principally in the form of locative adverbs (here and there) and demonstratives or determiners (this and that).” In English the spatial deictic system is indicated by two terms labeled proximal and distal. Such terms as *here* and *this* indicate that the location is relatively close to the speaker, and hence proximal. Conversely, the terms *there* and *that* indicate the relative distant of the location from the speaker, and hence distal. In considering spatial deixis, Yule (1996) warns that the location from the speaker's perspective can be fixed mentally and physically. Speakers temporarily away from their home location will often continue to use here to mean the (physically distant) home location, as if they were still in that location. Speakers also seem to be able to project themselves into other locations prior to being in those locations, as when they say "I'll come later" (movement to addressee's location). This is sometimes described as deictic projection.

8.2.4.4. Temporal Deixis

Cruse (2000: 321) asserts that temporal deictic s function to locate points or intervals on the time axis, using the moment of utterance as a reference point. The time axis can be divided into three major divisions: before the moment of utterance, at the time of utterance, and after the time of utterance. The time adverbial that forms a basic concept in temporal deixis in English includes now and then. *Now* displays the same capacity for indefinite extension, which can refer to a precise instant, such as Press the button-now!; or it can accommodate a wide swathe of time like The solar system is now in a relatively stable phase (Cruse, 2000:320). However, very often *now* indicates the time coinciding with the speaker's utterance; for example,

I am reading a novel now (the action done at the moment of the speaker's utterance).

Then, on the other hand, designate the time period which is distal from the speaker's utterance. Then is normally interpreted from the context, as the following sentences indicate:

(20) Watching movies at 8.30 tonight? Okay, I'll see you then.
(21) December 23 rd , 2002? I was in Solo then.

Apart from the time adverbial, there are essentially other types of temporal deixis worth mentioning here. One type is related to calendric notions that include both clock time as in [1] and calendar time as in [2]. Other temporal deictic related to calendric system includes such expressions as today, yesterday, tomorrow, this week, last week, next week, this month, last month, next month, this year, last year, and next year. The last type of temporal deixis in English is related to the verb tense, as illustrated in the following sentences.

(22) We live here now.
(23) We lived there then.

The verb tense in (3) is in simple present and is normally treated as close to (proximal) the speaker's current situation, whereas in (4) the verb tense is simple past, and is thought as distant (distal) by the speaker.

8.2.4.5. Discourse Deixis

Discourse deixis is actually a linguistic device used to designate an entity in the discourse. The linguistic devices can be the deictic expressions this and that, the expression hereby in the explicit performative sentence, and sentence adverbs such as therefore and furthermore. The following sentences exemplify each of these devices (Cruse 2000: 323).

(24) Listen to this, it will kill you!
(25) That has at least two implications.
(26) Notice is hereby served that if payment is further delayed, appropriate legal action will be taken.
(27) That rationale is controversial; furthermore.....

The deictic expression *this* in (5) and *that* in (6) respectively refer to future discourse element and past discourse element. Similarly, the *hereby* in (7) points to current discourse. Finally, the sentence adverb marker in (8) refers to what follows in the future discourse. Discourse deixis is not, however, to be confused with anaphora, the difference being that the latter might extract a referent from an extralinguistic entity. Thus the anphor *she* in sentence (9) below does not strictly refer to the word *Susan* itself.

(28) Susan is indeed sexually attractive. She has been admired by many men.

LEARNING ACTIVITY 8.2.

(1) Describe the different types of referents with examples.
(2) Describe the different types of reference with examples
(3) Differentiate between anaphora and cataphora.
(4) Discuss the different types of dexis.

8.3. Speech acts

A speech act in linguistics and the philosophy of language is an utterance that has performative function in language and communication. According to Kent Bach, "almost any speech act is really the performance of several acts at once, distinguished by different aspects of the speaker's intention: there is the act of saying something, what one does in saying it, such as requesting or promising, and how one is trying to affect one's audience." The contemporary use of the term goes back to J. L. Austin's development of performative utterances and his theory of locutionary, illocutionary, and perlocutionary acts. Speech acts are commonly taken to include such acts as promising, ordering, greeting, warning, inviting and congratulating.

8.3.1. Austin's speech act theory

A theory of language based on J. L. Austin's How to Do Things with Words (second edition, 1975), the major premise of which is that language is as much, if not more, a mode of action as it is a means of conveying information. As John Searle puts it, "All linguistic communication involves linguistic acts. The unit of linguistic communication is not, as has generally been supposed, the symbol, word, or sentence, or even the token of the symbol, word, or sentence, but rather the production or issuance of the symbol or word or sentence in the performance of a speech act." Meaning, then, should be regarded as a species

within the genus intending-to-communicate, since language itself is highly complex, rule-governed intentional behavior. A theory of language is part of a theory of action. The basic emphasis of speech act theory is on what an utterer (U) means by his utterance (x) rather than what x means in a language (L). As H.P. Grice notes, "meaning is a kind of intending," and the hearer's or reader's recognition that the speaker or writer means something by x is part of the meaning of x. In contrast to the assumptions of structuralism (a theory that privileges langue, the system, over parole, the speech act), speech act theory holds that the investigation of structure always presupposes something about meanings, language use, and extralinguistic functions.

In *How to Do Things with Words*, Austin commences by enunciating a reasonably clear-cut distinction between constative and performative utterances. According to him, an utterance is constative if it describes or reports some state of affairs such that one could say its correspondence with the facts is either true or false. Performatives, on the other hand, "do not 'describe' or 'report' or ‘constate’ anything at all, are not 'true' or 'false.' . . . The uttering of the sentence is, or is part of the doing of an action, which again would not normally be described as saying something." Marrying, betting, bequeathing, umpiring, passing sentence, christening, knighting, blessing, firing, baptizing, bidding, and so forth involve performatives. The attitude of the person performing the linguistic act – his thoughts, feelings, or intentions – is of paramount importance. Whereas the constative utterance is true or false, the performative utterance is felicitous or infelicitous, sincere or insincere, authentic or inauthentic, well invoked or misinvoked. An "I do" at a marriage ceremony is insincere and misinvoked if the utterer is already married and has no intention of abiding by the conditions of the contract.

Austin divides the linguistic act into three components. First, there is the locutionary act, "the act of 'saying' something." Second, there is the illocutionary act, "the performance of an act in saying something as opposed to the performance of an act of saying something." Third, there is the perlocutionary act, for "saying something will often, or even normally, produce certain consequential effects upon the feelings, thoughts, or actions of the audience, of the speaker, or of other persons." In other words, a locutionary act has meaning; it produces an understandable utterance. An illocutionary act has force; it is informed with a certain tone, attitude, feeling, motive, or intention. A perlocutionary act has consequence; it has an effect upon the addressee. By describing an imminently dangerous situation (locutionary component) in a tone that is designed to have the force of a warning (illocutionary component), the addresser may actually frighten the addressee into moving (perlocutionary component). These three components, then, are not altogether separable, for as Austin points out, "we must consider the total situation in which the utterance is issued -- the total speech act -- if we are to see the parallel between statements and performative

utterances, and how each can go wrong. Perhaps indeed there is no great distinction between statements and performative utterances." In contradistinction to structuralism, then, speech act theory privileges parole over langue, arguing that external context -- the context of situation -- is more important in the order of explanation than internal context -- the interrelationships among terms within the system of signs. (See also Linguistics and literary theory.)

The concept of an illocutionary act is central to the concept of a speech act. Although there are numerous opinions regarding how to define 'illocutionary acts', there are some kinds of acts which are widely accepted as illocutionary, as for example promising, ordering someone, and bequeathing.

Following the usage of, for example, John R. Searle, "speech act" is often meant to refer just to the same thing as the term illocutionary act, which John L. Austin had originally introduced in How to Do Things with Words (published posthumously in 1962). Searle's work on speech acts is also commonly understood to refine Austin's conception. However, some philosophers have pointed out a significant difference between the two conceptions: whereas Austin emphasized the conventional interpretation of speech acts, Searle emphasized a psychological interpretation (based on beliefs, intentions, etc.).

According to Austin's preliminary informal description, the idea of an "illocutionary act" can be captured by emphasizing that "by saying something, we do something", as when someone issues an order to someone to go by saying "Go!", or when a minister joins two people in marriage saying, "I now pronounce you husband and wife." (Austin would eventually define the "illocutionary act" in a more exact manner.)

An interesting type of illocutionary speech act is that performed in the utterance of what Austin calls performatives, typical instances of which are "I nominate John to be President", "I sentence you to ten years' imprisonment", or "I promise to pay you back." In these typical, rather explicit cases of performative sentences, the action that the sentence describes (nominating, sentencing, promising) is performed by the utterance of the sentence itself.

Austin (1962) describes the Speech Acts theory as an approach that explains the roles of utterances in shaping the attitudes of participants in interpersonal communication. Speech acts reveal the intentions of speakers and the effects the speaker’s utterances and expressions have on the hearers. The implication of speech acts is that every utterance has a purpose which derives from the specific context. It has been

observed that language use depends on such contextual factors as social and physical conditions, attitudes, abilities, beliefs and the relationship existing between the speaker and the listener.

8.3.1.1. Levels of Speech Acts

There may be some confusion regarding types and levels of speech acts. We have already discussed types of speech acts – representative, declarative, directive, expressive and commissive. For levels of speech acts, emphasis is on the different stages of interaction between the speaker and the listener through the use of speech acts. Three distinct levels are usually observed – locutionary, illocutionary and perlocutionary acts.

Locutionary Acts – These are observed as the processes of producing grammatical and meaningful utterances which can be recognised by the hearer.

Illocutionary Acts – Illocutionary acts are the force behind the utterances. Indeed, the speaker performs these acts to achieve the purpose of communication as a statement, a question, a command, an invitation, a threat, a request, an apology etc. It is possible, for instance, to use a sentence that has the structure of a statement for the purpose of a warning. For example:

(i) You will lose all your deposits – (from a financial adviser to a client)

This sentence may be a warning or a piece of advice. Therefore, it is possible to use identical utterance types for different tokens based on the intentions of the speaker and the context.

Perculationary Acts – These are the effects of the speaker's utterance on the behaviour of the hearer. They are the acts performed by the hearer as a result of the effect of the speaker's utterances. It is assumed, for instance, that the hearer will respond to a question of the speaker in a specific way, or behave in accordance with the demands of the context. It should be noted that the illocutionary force is the intended effect of an utterance on the hearer from the point of view of the speaker. The perlocutionary effect is the actual effect of the speaker's utterance on the action, behaviour, attitude or belief of the hearer.

Maximum communication is achieved when there is illocutionary uptake. This situation arises when the listener understands the intended effect of the speaker. This demand is at the core of semantics since meaning must be shared.

Austin himself admits that these three components of utterances are not altogether separable."We must consider the total situation in which the utterance is issued- the total speech act – if we are to see the

parallel between statements and performative utterance, and how each can go wrong. Perhaps indeed there is no great distinction between statements and performative utterances." (Austin 1962).

8.3.1.2. Different types of speech acts

There are different types of speech acts, the most common being the following:

(a) Representative Acts;
(b) Declarative Acts
(c) Directive Acts
(d) Expressive Acts; and
(e) Commissive Acts.

Representative Acts: These acts describe events, processes and states. Usually, the speaker is committed to the truth of the assertion, claim, report, suggestion, prediction, description, hypothesis or conclusion. Declarative Acts: These are acts that immediately change the state of affairs to which they apply. These acts are used in arresting, christening, marriage, sentencing, acquittal etc. Consider the following:

(29) I discharge and acquit the accused
(30) I hereby name this baby Amanda

Directive Acts: In directive acts, the addressee is instructed to carry out some instruction by responding verbally to an utterance or by performing some physical actions. The acts can be questions, commands, requests, pleas or invitation.

e.g.
(31) Kindly lend me some money!
(32) Please, be my guest!
(33)What is your name!

Expressive Acts: Expressive acts show the psychological states – feelings and attitudes towards some events and affairs. These usually occur in greetings, scolding, condoling, appreciating, thanking, congratulating, apologising, etc.

e.g.

(34) we congratulate you on your success

(35) I apologise for my mistakes

Commissive Acts: In Commissive Acts, the speaker is committed to some future action as in challenging, betting, promising, offering, threatening, vowing, warning, etc.

e.g.

(36) I pledge a hundred thousand Naira

(37) We promise to build them a house

It should be noted that commissive acts carry specific performative verbs – *promise, swear, name, pledge, warn, advise, declare, be*t.

8.3.2. Searle's Classification of illocutionary speech acts

Performative verbs fall fairly naturally under a small number of headings. It is useful to group them in this way, as it enables us to gain a picture of the range of functions that these verbs perform. Searle (1975) has set up the following classification of illocutionary speech acts:

Assertives: Assertives commit the speaker to the truth of the expressed proposition:
state, suggest, boast, complain, claim, report, want (that)
Directives: Directives have the intention of eliciting some sort of action on the part of the hearer: order, command, request, beg, beseech, advise (to), warn (to), recommend, ask, ask (to)
Commissives: Commissive commit the speaker to some future action:
promise, vow, offer, undertake, contract, threaten
Expressives: Expressives make known the speaker's psychological attitude to a presupposed state of affairs: thank, congratulate, condole, praise, blame, forgive, pardon
Declaratives: Declaratives are said to bring about a change in reality: that is to say, the world is in some way no longer the same after they have been said. In an obvious sense this is true of all the performative verbs: after someone has congratulated someone, for instance, a new world comes into being in which that congratulation has taken place. The specialty about declaratives is that they cause a change in the world over and above the fact that they have been carried out. If someone says, I resign, then thereafter they no longer hold the post they originally held, with all that that entails.

resign, dismiss, divorce (in Islam), christen, name, open (e.g. an exhibition), excommunicate, sentence (in court), consecrate, bid (at auction), declare (at cricket)

There is a finite number of explicit performative verbs in English (several hundred), but there is no reason to believe that there is a theoretically finite set of possible speech acts.

LEARNING ACTIVITY 8.3.

(1) Define speech act.
(2) Differentiate the following form one another: locutionary, perlocutionary and illocutionary acts.
(3) Describe the types of speech acts.
(3) Describe the Searle's classification of performative verbs.

8.4. Implicatures

Implicature is a technical term in the pragmatics sub-field of linguistics, coined by H. P. Grice, which refers to what is suggested in an utterance, even though neither expressed nor strictly implied (that is, entailed) by the utterance. As an example, the sentence "Mary had a baby and got married" strongly suggests that Mary had the baby before the wedding, but the sentence would still be strictly true if Mary had her baby after she got married. Further, if we append the qualification "not necessarily in that order" to the original sentence, then the implicature is now cancelled even though the meaning of the original sentence is not altered."Implicature" is an alternative to "implication," which has additional meanings in logic and informal language.

8.4.1. Grice's conversational maxims

Implicture, a term coined by H.P. Grice refers to what is suggested in an utterance and which may not have been expressed. The speaker deliberately breaks the rules of a conversational maxim to convey additional meaning. For instance, the following could be a possible question and respond respectively:

(38) Do you really believe Betty?
(39). She was speaking grammar.

The answer implies, among other things that Betty was not telling the whole story. It is expected of people in communication to obey certain co-operative principles. These principles have been presented as maxims's of quantity, quality, relation and manner.

8.4.1.1. Maxim of quality

Maxim Quality is concerned with truth telling, and two parts:

(i) Do not say what you believe is not rue;
(ii) Do not say that for which you lack evidence.

One could argue that the second sub-maxim entails the firs: thee will obviously not be adequate evidence for a false statement. We can paraphrase this maxim as Do not make unsupported statements (Cruse, 2000: 355).

8.4.1.2. Maxim of Quantity

Maxim of quantity is concerned with the amount of information (taken in its broader sense) an utterance conveys.

(i) Make your contribution information enough;
(ii) Do not make your contribution more informal than necessary.

8.4.1.3. Maxim of relation

The maxim is very simple: Be relevant. The point of this maxim is not sufficient for a statement to be true for it to contribute an acceptable conversational contribution. For example

A: Have you seen Mary today?
B: ?I am breathing.

Notice that this maxim is implicated in the Maxim of quantity, which could easily be reformulated as: [Make] the strongest statement that can be relevantly made.

8.4.1.4. Maxim of manner

Maxim of manner has four components:

(i) Avoid obscurity of expression.
(ii) Avoid ambiguity.
(iii) Avoid unnecessary prolixity.
(iv) Be orderly.

It is generally regarded as being less important that the others. There are also conventional implicatures used for communicating non-truth-conditional meaning for specific linguistic expressions. It is largely self-explanatory.

8.4.2. Conversational implicature

Paul Grice identified three types of general conversational implicatures:

1. The speaker deliberately flouts a conversational maxim to convey an additional meaning not expressed literally. For instance, a speaker responds to the question "How did you like the guest lecturer?" with the following utterance:

Well, I'm sure he was speaking English.

If the speaker is assumed to be following the cooperative principle, in spite of flouting the Maxim of Relevance, then the utterance must have an additional nonliteral meaning, such as: "The content of the lecturer's speech was confusing."

2. The speaker's desire to fulfill two conflicting maxims results in his or her flouting one maxim to invoke the other. For instance, a speaker responds to the question "Where is John?" with the following utterance:

He's either in the cafeteria or in his office.

In this case, the Maxim of Quantity and the Maxim of Quality are in conflict. A cooperative speaker does not want to be ambiguous but also does not want to give false information by giving a specific answer in spite of his uncertainty. By flouting the Maxim of Quantity, the speaker invokes the Maxim of Quality, leading to the implicature that the speaker does not have the evidence to give a specific location where he believes John is.

3. The speaker invokes a maxim as a basis for interpreting the utterance. In the following exchange:

Do you know where I can get some gas?

There's a gas station around the corner.

The second speaker invokes the Maxim of Relevance, resulting in the implicature that “the gas station is open and one can probably get gas there”.

8.4.2.1. Scalar implicature

According to Grice (1975), another form of conversational implicature is also known as a scalar implicature. This concerns the conventional uses of words like "all" or "some" in conversation.

I ate some of the pie.

This sentence implies "I did not eat all of the pie." While the statement "I ate some pie" is still true if the entire pie was eaten, the conventional meaning of the word "some" and the implicature generated by the statement is "not all".

8.4.2.2. Conventional implicature

Conventional implicature is independent of the cooperative principle and its four maxims. A statement always carries its conventional implicature.

Donovan is poor but happy.

This sentence implies poverty and happiness are not compatible but in spite of this Donovan is still happy. The conventional interpretation of the word "but" will always create the implicature of a sense of contrast. So Donovan is poor but happy will always necessarily imply "Surprisingly Donovan is happy in spite of being poor".

8.4.2.3. Implicature vs entailment

This can be contrasted with cases of entailment. The statement "the President was assassinated", for example, not only suggests that "the President is dead" is true, but requires this to be so. The first sentence could not be true if the second were not true; if the President were not dead, then whatever it is that happened to him would not have counted as a (successful) assassination. Similarly, unlike implicatures, entailments cannot be cancelled; there is no qualification that one could add to "the president was assassinated" which would cause it to cease entailing "the president is dead" while also preserving the meaning of the first sentence.

It is always common to hear people argue over what is meant, and what is implied. This means that there could be differences between what a speaker says and how the listener interprets it. However, success in

communication depends on how well the meaning intended by the speaker and the implicature of the listener converge. This is usually possible when participants in communication obey principles of conversational implicature**.**

LEARNING ACTIVITY 8.4.

(i) Discuss about Grice's conversational maxims.
(ii) Describe about conversational implicatures.
(iii) Differentiate between scalar implicature and conventional implicature.

SUMMARY

We have discussed about the role of pragmatics in semantics. In the second part of the unit we have discussed about reference, anaphora and dexis. We have studied the difference and the relation between reference, referring expression and referent. We have also learned about the types of referents and the types of reference. We have discussed about anaphor and dexis in details. We have learned about dexis and its types. In the third part of the unit, we have discussed about speech acts. We have learned about Austin's speech act theory and Searle's classification of speech acts. In the third part of the unit we have discussed about implicature. We have learned about Grie's conversational maxims and conversational implicature

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